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COA Speaks

Story by Tan Wee Meng / Photography by Wan Zhong Wei

In conjunction with the Army Open House 2009, Chief of Army (COA) MG Neo Kian Hong hosted a local media interview on 31 August to share his thoughts on operationalising the 3rd Generation Army. During the interview, he touched on four key areas - the 3rd Generation Army as a full spectrum force, training transformation, commitment to defence and our Army Culture. Army News brings you excerpts from COA's comments on these pertinent issues.



"Are you willing to serve your nation? That is the key idea. That is the reason why I am never enamoured by all the high tech stuff, I am rather hard-nosed and I say in the end, we must make sure that our people are committed, every one of them."

MG Neo Kian Hong, Chief of Army
31 August 2009

3rd Generation Army : A Full Spectrum Force

How do you define the 3rd Generation Army? If you said networked capabilities, devastating firepower and greater mobility, you would be spot on. Commenting on the difference between the 2nd and 3rd Generation Army, COA said, "The main difference is the network and lethality. With the network, you are able to bring to bear a lot more firepower, which the soldier may otherwise not be able to get." The 3rd Generation Army is also able to deal with conflicts of various intensities and take on a wide spectrum of different operations, from homeland security to large scale operations in war.



The Terrex ICV will significantly boost our Infantry's capabilities

COA also spoke on the enhanced mobility afforded by the Terrex, the newly introduced Infantry Carrier Vehicle (ICV). He said, "If the infantryman can only walk and use his legs to clear distances, you can imagine how slow the battle will be. Secondly, if he is not protected on his way to the mission area, there will also be attrition. The Terrex gives you protection and mobility." The Terrex complements the Bionix Infantry Fighting Vehicle to further raise the "system-level" protection for our troops, while the use of Integrated Body Armour protects the soldiers on the ground. With the Advanced Combat Man System (ACMS) connecting the fighting platforms and men, the full fighting capabilities of the Army can be unleashed.

However, with this impressive hardware coming into service, soldiers often wonder when they would get the chance to train on and operate them. COA revealed, "The whole development of the Army will be done in three spirals. This is the first spiral and by 2010, you will see a slice of the Army equipped with this latest equipment and then we will start to move into the rest of the Divisions. So by the end of three spirals, all the Divisions will be getting the latest equipment and wherever possible, we would have pushed down the equipment to the people who are training."

Training Transformation : More than Just Hardware

All the new hardware and our expanded spectrum of operations inevitably impact the way the Army trains. In this

age of rapid changes, our Army must react and adapt fast to new challenges. COA elaborated, "If you look at the time the Mumbai attacks happened to the time we did Northstar VII, you will see the amount of time that we took to learn and put back into our operating system. If you look at things that are happening in different places, whether it is in Iraq or Afghanistan, all these lessons, we plough it back to our system and learn very quickly."

Ex-Northstar VII demonstrated our Army's close cooperation with the Home Team and our capabilities to deal swiftly with the terrorist threat. To further raise the bar, COA revealed plans to develop a Multi-Mission Range Complex to hone our soldiers' judgement and shooting skills in configurable mission settings.

One key development in training transformation highlighted by COA is the soon-to-be launched LEARNet. This bold initiative to make knowledge easily accessible online is aimed at the new generation of IT-savvy servicemen who prefer collaborative learning and learner-centric training. COA commented, "Interestingly, we are finding that the new generation is able to pick up things quite intuitively. We don't have to spend too much time training them. They pick up knowledge in technology quite quickly. So we are trying to make sure that through LEARNet, gaming and simulation, they can pick up the knowledge quickly so that we can train them more effectively and efficiently."



Ex-Northstar VII showed how rapidly our Army learns from security developments in the region

Commitment to Defence

For all the cutting edge technology that our Army possesses, COA was "hard-nosed" enough to recognise and reiterate that our highly sophisticated hardware is no substitute for heartware - the commitment of our fighting men. He viewed engendering commitment to defence as one of the most

important challenges for the 3rd Generation Army. For this, COA identified the support of the family and employer (for NSmen) as two critical pillars that will encourage our fighting men to give their best to their duties. He added, "And that is the reason why we need to engage many of them, and of course, the society at large. And I see this as very, very important, no less important than all the work that has been highlighted upfront."



Family support plays a crucial role in strengthening our servicemen's commitment to defence

COA cited heart-warming examples of servicemen with exemplary conduct and achievement, some of whom have been featured in Army News. [Refer to Issue 167 for more on LTA Justin Lee and SSG Muthukumarani]

Our Army Culture

To achieve its world class vision, it is imperative that our Army is a learning organisation with a culture of openness. COA elucidated, "The people who come into the Army now, about 60 or 70 percent of them are 'A' Level or Diploma holders. Everyone is very good and capable. The issue now is how do we tap on this collective knowledge? And the only way is to make sure that we listen to them as well, even as we decide how to conduct their training. So we're listening to our people in BMT and our NSmen, so that they have a part to play as well."

On being open, COA said, "We're trying to make sure we explain as much as we can because once you understand, you acknowledge it and can also help us explain it to people. And interestingly, because we're so focused on our mission, we don't spend as much time doing this. But increasingly, we have to because stakeholders want to know what we're thinking and what we're doing."

While our Army pursues its vision for the future, COA also identified a few fundamentals that will not change. One such cornerstone is discipline. As COA put it, "And without discipline, honestly you can't do anything, much less run a military. Therefore, this portion is something that we feel is still very important." Another is an innovative spirit which will ensure that our Army continues to develop new capabilities and exercise prudence in its resource management. The resilience of our Army is another valuable trait because when the going gets tough, the tough get going.

Towards Effective Responses to Natural Disasters

Story by Ian Cheong / Photography by Jonathan Ong

Even in this technologically advanced age, man is often powerless against the might of nature. Natural disasters caused by earthquakes, typhoons and flooding are common news. Although we are safe from these calamities, our island is in fact nestled in a natural disaster-prone region. Recently, Typhoon Morakot swept through the Asia-Pacific region and left a trail of destruction in its wake - killing scores of people and leaving hundreds of thousands homeless. The need for effective, timely and coordinated responses to such unfortunate strikes is a clear one.

A good way to build up this coordinated response is through the sharing of best practices and cross-agency learning among the stakeholders. To this end, the government of Singapore and Australia, with the support of the United Nations Office for the Coordination of Humanitarian



The workshop enabled participants from 22 countries and 12 organisations to learn from each other and establish strong networks

Affairs (UN OCHA), held the Humanitarian Partnership and Disaster Preparedness, Response and Recovery (HP-DPR2) Workshop at the Pan-Pacific Hotel on 26 and 27 August. Participants included policy makers and operational experts directly involved in disaster preparedness, response and recovery. The workshop was co-chaired by Assistant Chief of the General Staff (Operations), BG Tung Yui Fai and the keynote address was delivered by Minister of State for Defence, Associate Professor (A/P) Koo Tsai Kee.

In his keynote speech, A/P Koo noted that the challenges in disaster management require a humanitarian culture that emphasises strong multi-stakeholder and multi-level partnerships between the various groups, citing the SAF's relief efforts experience in Aceh during the 2004 Boxing day tsunami as an example. He said, "A critical factor that enabled the SAF to contribute smoothly and meaningfully to the relief effort in Aceh was our ability to work closely with our partners from the Indonesian Armed Forces, the TNI, who were overseeing relief efforts on the ground. Our people-to-people networks enabled us to establish an instant foundation of trust that helped both sides work effectively together during the relief efforts. Such trust and rapport cannot be secured overnight. They have to be slowly built up through regular interactions."

Indeed, the workshop has helped the participants from 22 countries and 12 organisations establish strong networks as they collectively explored and discussed issues with regional resonance such as the multilateral humanitarian

system, the role of Non-Governmental Organisations (NGOs), civil-military coordination and disaster risk reduction. BG Tung said, "The sharing of good practices across agencies will enhance knowledge and raise standards of disaster management in the Asia-Pacific region. These networks will also be essential in facilitating and enhancing collaboration and cooperation when a disaster strikes. Such exchanges not only allow us to learn from each other, but also familiarise us with the common frameworks and planning mechanisms to ensure swift and prompt responses to natural disasters in the region."

One participant, LTC Lee Kuan Chung, Head of the General Staff in HQ Guards, shared his takeaway, "It's always useful for military officers to hear different perspectives from a wide variety of sources, be it from the NGOs, the host nation's perspectives and regional perspectives on what they think of disaster relief and response. At this conference we see people coming together, networking, and making friends."

The workshop also highlighted the role of the military in such operations. OCT Stanley Lim, an SAF Overseas Scholar, explained, "A military is actually quite crucial for such operations. After a natural disaster, infrastructure is destroyed so I think the military is there to provide access to such areas because it has the capability to do so." LTC Lee further added, "The various operational experiences and exercises we go through in the SAF accords us with valuable experiences we can bring to the table to help a defence partner."

US Army Chief of Staff Visits Singapore

Story by Samuel Cheam / Photography by Wan Zhong Wei

On 26 August, the Chief of Staff of the United States Army, GEN George W. Casey, Jr., visited the Ministry of Defence to call on Chief of Defence Force, LG Desmond Kuek; Chief of Army, MG Neo Kian Hong; and Deputy Prime Minister and Minister for Defence Teo Chee Hean. During his visit, GEN Casey was awarded the Meritorious Service Medal (Military) in an investiture. The medal was awarded to GEN Casey in recognition of his significant contributions in enhancing the bilateral ties between the US Army and the Singapore Army.

Later, GEN Casey visited the new Murai Urban Training Facility (MUTF) to view a demonstration of our advanced systems and platforms in the 3rd Generation SAF. GEN Casey viewed static displays of the Advanced Combat Man System and Integrated Body Armour and took a ride on the newly introduced Terrex Infantry Carrier Vehicle. When asked about his initial impression of the SAF's 3rd Generation



GEN Casey presenting a memento to COA, underscoring the strong ties between the two armed forces



GEN Casey being briefed on the fighting capabilities of the new Terrex Infantry Carrier Vehicle

developments GEN Casey said, "I must say I'm very impressed. I've always been very impressed with the professionalism of the Singapore Army which is one of the reasons I'm here." Later, GEN Casey also met some of our Army servicemen who were deployed in Afghanistan and they shared with him their experiences serving overseas.

Before leaving, GEN Casey spoke at the Temasek Society Lunch Talk Series on the topic of "Leadership Development and Engagement". Sharing from his personal experience as a commander, GEN Casey's talk drew one of the largest crowds at the Series to date. Referring to the importance of bilateral defence relations between the SAF and the US Army, GEN Casey stressed, "I believe we as the United States Army have to continue to strengthen our army-to-army relationship. And as we decrease the number of soldiers we have deployed in Iraq, we will increasingly have more opportunities to engage with other countries with which we haven't had the opportunity to do in the last several years."

Commandant USMC Visits Our Army

Story by Chia Han Sheng / Photography by Wan Zhong Wei

On 1 August, GEN James Conway, Commandant US Marine Corps (USMC) visited Pasir Laba Camp and the Murai Urban Training Facility (MUTF) to learn more about our 3rd Generation Army. The visit, hosted by Chief of Army MG Neo Kian Hong, highlighted the strong ties between the two armed forces and served as a platform to discuss regional security issues.

GEN Conway also witnessed an Urban Operations (UO) demonstration which showcased the sophisticated Advanced Combat Man System and instrumentation systems of the MUTF. During the visit, GEN Conway interacted with our soldiers and was thoroughly impressed by our 3rd Generation Army's UO capabilities.



GEN Conway (right) trying out our Army's new Load Bearing Vest

New Commander for Our Army's 3rd Division

Story by Ian Cheong / Photography by Jonathan Ong



BG Tan (left) handing over the command of 3 DIV to COL Tan (right)

On 31 August, BG Tan Chuan-Jin relinquished his appointment as Commander 3rd Singapore Division (3 DIV). He was succeeded by COL Mark Tan who was previously the Assistant Chief of the General Staff (Plans).

In his farewell speech at the Change-of-Command Parade held at Jurong Camp I, BG Tan shared, "All of you walked this journey with me. And most importantly, we walked the journey together. You walked not in front of me or behind me but by my side. It makes a tremendous difference and it is important to remember that our Army is and will always be about our people. We can transform all we want, but the heart of the Army is the individual and the team. That is what I will always remember of my time in 3 DIV and for that I'll always be grateful." BG Tan is confident that COL Tan will continue to lead 3 DIV to even greater heights and knows that the division "welcomes him with open arms."

BG Tan Chuan-Jin is now Commander TRADOC, having taken over from BG Lim Teck Yin on 28 August. BG Tan and COL Tan shared with Army News their thoughts.

COL Mark Tan

What are your thoughts as the new Commander 3 DIV?

3 DIV has always been at the forefront of the Army's development since its inception. I'm honoured to be given this privilege of leading the division through this 3rd Generation Army transformation and I look forward to this challenge. Given the quality of people in the division, I have no doubt that we are well placed to overcome any challenges and build the 1st digitised Combined Arms Division (CAD) for the 3rd Generation Army.

You've held many different appointments during your Army career. Any key insights to share?

To sum up a 20-over year career in a few sentences, that's tough! I would say that the Army is a very interesting place to be in, because first of all it's an institution - it has a rich history and tradition, yet it has not remained static. Over the many years that I've been with the organisation, I've seen how the organisation has moved, evolved and in many areas, quickly transformed. From an organisational perspective, what I've gained comes from seeing how a large institution maintains its course and yet moves with the times with regard to both people and systems. It's a tremendous learning experience.

From the individual perspective, the greatest takeaway is really the opportunity to deal with different people - NSFs, Regulars, NSmen, DXOs and all our partners in the defence industry. Everyone is different and you need to interact differently with each individual to engage them. Once you do so, you understand the dynamics that make a large organisation like the Army tick and what it takes to move, motivate and engage people. We sometimes forget that one is not always naturally imbued with all these qualities to deal with different problems and it takes time to build up these experiences. I am thankful that the organisation has given me the opportunity to do so.

As our Army transforms into a 3rd Generation fighting force, how can 3 DIV remain relevant in supporting our Army's operations?

The fundamental reason for an Army to exist in peacetime is to ensure that military options are available to deal with peacetime contingency operations and in the extreme scenario, to defend the nation in times of war. Thus, every unit has a duty to achieve high training and operational readiness to support our Army's operations when required. During our transformation, it is paramount that we remain focused on the task at hand. We do not change for change's sake, but to build a stronger force that can fulfil our mission and tasking in a superior way. 3 DIV as a 3rd Generation CAD must be able to fight as a system of systems, fully integrated with other Army forces and capabilities. 3 DIV cannot just run its own course but must stay aligned with the wider Army's transformation.

BG Tan Chuan-Jin

Our Army places much emphasis on the term 3rd Generation. What does this term mean to you?

3rd Generation at the capability development level would definitely be about the capabilities we are bringing in to the SAF today, but we should look at it in another dimension. In the 3rd Generation SAF, it really is about the way we manage and lead our people. Our systems and capabilities are there but we are fully aware that the population is moving on. With this different profile of people, how we lead and engage our people is very important. To me, it is all about fostering understanding and making the intent known. Once there is a clear purpose, there is no limit to what we can achieve. With all the capable systems we have, we need people with this unlocked potential - so that they can operate these systems the best as they can.

Linking this back to my new role as Commander TRADOC, we need to develop new doctrines to support



Commanders and men from 3 DIV marching into the Parade Square to bid farewell to BG Tan

what we're doing. In the past, you can just look at the manuals and doctrines of other first world militaries and take reference. I believe the SAF has reached a stage whereby we are at the forefront - and we're asking the fundamental and difficult questions that other first world militaries are asking. I believe that we need to chart this path forward as well.

Can you share with us on your lessons learnt from the various operations, such as Operation Flying Eagle, that you have been involved in?

I've learnt that clarity is really very important. I believe that the role of a leader is to inspire. It has nothing to do with charisma, it's about people following you. I think this boils down to a couple of basic things, and clarity is one of them. Once people are clear about the goals, objectives, what they want to achieve, and the considerations behind certain processes, they'll know how to operate. They'll know how to move on from there because they are confident and certain of their environment.

But in order to maximise that space, you also need the correct climate. The climate comes not just from what you say, but the little things you do daily. If you come down hard on someone who took initiative to do something but failed, then he'll shrink into a space where he knows he wouldn't get into trouble. So you don't maximise his potential. Once you have this climate, people would naturally show greater initiative and commitment. It's good for the leader as well because he doesn't need to micro-manage everything but instead CAN deal with things at his level and beyond.

For example, at Operation Flying Eagle, it was about the strategic political picture, the situation on the ground, the media and so on. I was able to focus fully on my role because my team was confident and clear in its mission.

What are your reflections as you leave 3 DIV?

I'm glad that during my time in 3 DIV, both my team and I have laid down some ideas about where the division is going, the culture and beliefs that we think are befitting for a division like 3 DIV. I'm confident the new team will continue to build on this, just as I built on and stood on the shoulders of all those who came before me. 3 DIV is not about the individual, it's an entity that spans across time and all of us who come in as commanders, as custodian for a period of time. Our responsibility is really to build on all who came before us, to leave this place better than when we very first came in. I am certain that this culture of excellence will continue, not just in 3 DIV, but I think across the Army. This pursuit of excellence is a hallmark of what the SAF is about.

SAF Scholarships

Developing Our Future Leaders

Story by Ian Cheong / Photography by Wan Zhong Wei

"We need to continue to bring on board some of the best young people who can think ahead, integrate the latest technologies and bring about new concepts of operations, and implement bold and creative plans to bring the SAF to the next level." This imperative was reiterated by Deputy Prime Minister and Minister for Defence Teo Chee Hean at the SAF Overseas Scholarship (SAFOS) Award Presentation Ceremony held at the Istana on 11 August.

Introduced in 1971, the SAFOS is the premier scholarship in the SAF that aims to attract Singapore's top talents to join the organisation. DPM Teo said, "We need soldier-scholars, warrior-diplomats - leaders who can envision the future, who can inspire and lead their men in battle, who understand that the price of peace is perpetual vigilance, and that the ultimate aim of war, should the need ever arise, is to win the peace."

Of this year's six SAFOS recipients, three are from the Army, namely OCT Chua Xianyi, OCT Stanley Lim and 2LT Jerik Mok. OCT Stanley Lim, who will be pursuing a double degree in Biology and Business at the University of



(from left) 2LT Jerik Mok, OCT Chua Xianyi and OCT Stanley Lim received the SAFOS from DPM Teo on 11 August (Picture courtesy of Pioneer)



Chief of Army, MG Neo Kian Hong (centre) interacting with SMS recipients, LTA Chen Jingkai (left) and LTA Chen Jingkang (right)

Pennsylvania in the USA, is excited about the new challenges his studies and future career will pose. He shared, "When you're overseas, you experience things from a different angle. You get to see how people think, learn and interact differently. Through this experience, I can broaden my perspectives and horizons and this is very important in man management. Our Army is about our people and managing our people well is very important." He continued, "Human resource is Singapore's most important asset. I believe that the experience and leadership skills I can pick up during my studies will greatly help me to motivate and lead my men in the future."

Besides the SAFOS, there are also the SAF Merit Scholarship (SMS) and the Defence Merit Scholarship. Awards for these two scholarships were presented by Minister for Education and Second Minister for Defence Dr Ng Eng Hen to 20 recipients at the Temasek Club on 18 August.

Among the 13 SMS recipients is LTA Chen Jingkai, a Platoon Commander from 42nd Battalion, Singapore Armoured Regiment (42 SAR), who decided to take on the scholarship in his second year of National Service. For him, his time in the Army enabled him to find his calling in life. He said, "The defence of Singapore is an important area I can contribute to and besides, I find many joys in the job I'm doing now. It really has been a blessing in disguise because it gave me a taste of what I really wanted out of life."

For LTA Chen Jingkai, a major attraction in an Army career is the experience of bonding and forging collective memories with other people. He shared, "In the Army, we all experience a very strong bonding among our people. Sometimes, to achieve an objective we have to train very hard together, and then go on to accomplish something collectively under very physically strenuous circumstances. This camaraderie is something that we don't really experience when we're outside."



LTA Chen Jingkai (right) receiving his scholarship from Minister for Education and Second Minister for Defence Dr Ng Eng Hen

LTA Chen Jingkai also welcomed the prospect of honing his leadership qualities. He said, "I'm very honoured that the organisation trusts me to make important decisions. For example, in war, I would have 30 men under me and every decision that I make is a matter of life and death. This is a very heavy responsibility because life is priceless." To him, a military career will provide him with many invaluable life skills. He said, "As a leader in the SAF, I will learn how to sieve out the relevant information and adapt it to changing situations and circumstances. I think the ability to appreciate and embrace change is something I will develop in my career, and is one of the most important skills an individual can possess."

For more information on SAF scholarships, please access www.mindef.gov.sg/scholarship, or contact 6373 6243.

The CDF Essay Competition 2008

Our Thinking Soldiers

Story by Samuel Cheam / Photography by Jonathan Ong

When people think of Army Officers, the usual image that springs to mind is a brawny soldier leading his men and charging up a steep hill. Our Army's officers are much more than that. They are thinking soldiers, as evident in this year's Chief of Defence Force (CDF) Essay Competition.

The annual competition was introduced in 1987 to encourage SAF officers to research on military or military-related subjects. Organised by POINTER magazine, the 2008 CDF Essay Competition attracted 197 entries SAF wide. The winners received their prizes from CDF, LG Desmond Kuek, in a presentation ceremony on 27 August. Army News interviewed two Army Officers who distinguished themselves in the CDF Essay Competition 2008.

The 2nd prize winner for the CDF Essay Competition was MAJ Alan Foo, Battalion second-in-command of the 9th Signals Battalion. He explained the relevance of his topic, "Countering Radical Islamic Terrorism in Southeast Asia" and said, "I think the issue is important as the SAF today



MAJ Alan Foo found the CDF Essay Competition a rewarding experience

the process of researching topics and issues that are beyond my daily scope of work. Besides gaining insights on the research topic, this enriching experience has also broadened my outlook and thinking."

Nuclear weapons might be seen as a legacy of the Cold War, but CPT Chan Yong Sheng's essay on Nuclear

is required to conduct a full spectrum of operations which includes having to deal with such threats." His essay focused on the infamous Jemaah Islamiyah (JI) terrorist network and proposed a strategy using elements from Sun Tzu's Art of War to undermine its effectiveness. MAJ Foo firmly believes that the CDF Essay Competition has been a rewarding experience and said, "Personally, I have benefited a lot through

Renaissance in Southeast Asia certainly proves otherwise. A Staff Officer in the Army Information Centre, CPT Chan explained his choice of topic, "Unknown to many, some countries in this region will start developing nuclear facilities as traditional energy resources run dry. With the advent of nuclear development, there will be issues of concern like the safety of nuclear materials or possible sabotage by terrorist groups." CPT Chan's essay examined the potential risks and recommended a multilateral framework to protect the region from such risks. CPT Chan's discourse won a Merit Award. A modest CPT Chan confessed that winning was not on his mind when he decided to participate, "I started out with the goal to communicate my ideas with the senior leadership. Winning the Merit Award certainly came as a bonus."



CPT Chan was motivated by a desire to communicate his ideas

Terrex ICV

Faster, Safer, Networked and Packs a Punch

Story by Marcus Ho / Photography by Chia Han Sheng, Jonathan Ong & Wan Zhong Wei



"The Terrex ICV is not just another standalone fighting platform. It can fight a mean fight, for sure. But it is more than that. It is a capability platform. With its mobility, protection, firepower and networked capabilities, it enables our Infantry forces to bring the whole SAF's combat resources to bear at the sharp end of the fight. It enhances the combat capability of our Infantry forces in accordance with the tenets of precision manoeuvre, precision fires and precision information."

COL Lim Hock Yu,
Commander 9th Singapore Division/Chief Infantry Officer

At the mention of Infantry, many would conjure up images of long route marches and strenuous outfield exercises. While the fundamental concept and role of the Infantrymen have remained unchanged, our 3rd Generation ground troops today possess more firepower and punch to make them a more lethal fighting force. This has just been further boosted with the recent introduction of the versatile, cutting-edge eight by eight wheeled Terrex Infantry Carrier Vehicle (ICV). The locally designed vehicle raises the combat effectiveness of the Infantry forces through its enhanced capabilities in networking, mobility, firepower and protection.



Soldiers dismounting from the Terrex ICV are ready for immediate action

Networking Capabilities Provide the Edge

Equipped with the Battlefield Management System (BMS), the Terrex ICV can connect with other land and air platforms such as the Leopard Main Battle Tanks and Apache Attack Helicopters. It can also network with soldiers equipped with the Advanced Combat Man System (ACMS). The BMS is also integrated with a Blue Force Tracking and Red Force Marking System (BFT/RFM) which enables our friendly forces to be tracked in blue and enemy locations to be marked in red. This enhances our overall situational awareness and the sharing of key battlefield information. Soldiers can call for support from air and land forces to execute manoeuvres and deliver precision fires on enemy targets.

of motorising the Infantry force in reducing soldier fatigue, 1WO Kalai said, "The first enemy of every infantry soldier is always his fatigue. In the past, soldiers had to walk long distances before reaching their objective. By then, they would be too tired to engage the enemies. The Terrex ICV is able to reach the location fast and bring the soldiers very close to engage the enemy."

In the past, soldiers had to navigate with a map and compass. The Terrex ICV has a Vehicle Navigation System (VNS), which is similar to the Global Positioning System (GPS). This enables the driver to navigate accurately on the battlefield. MSG Neo Teck Chong, Assistant Company Trainer from the Motorised Training Cadre, a qualified

1WO Kalai Selvan, Trainer from the Motorised Training Cadre elaborated, "With the BMS, it will be much easier to share information. For example, when the scouts have located the enemies, they'll be able to mark their exact locations and even snap photos using the ACMS. This information will then be transmitted to the Terrex ICV, and the commanders can respond accordingly. In the past, the scouts used radio sets to transmit the information and the commanders had to constantly refer to the map grid references. The BMS is now so much more efficient!"



A section commander operating the BMS in the Terrex ICV

Arriving in Great Shape

With a maximum road speed of 105 kilometres per hour, the highly mobile Terrex ICV can speedily deliver 11 soldiers, excluding the vehicle driver and commander, over various terrain to their combat zone. Commenting on the importance



The large tyres enable the Terrex ICV to traverse various terrain

Terrex ICV driver expounded, "Driving the Terrex ICV is as easy as driving any other vehicle. Previously, we would always have to stop and check the map, but now all I have to do is to mark my waypoints and simply drive to the location."

Enhanced Protection and Firepower

In urban warfare, troops often have to travel through built-up areas and there is no worse scenario than being fired upon by enemies holding advantaged positions. The Terrex ICV ameliorates this by providing a modular protection system, which can be fortified with an add-on protection suite to provide all-round protection against conventional threats. It

is also designed to withstand mine blasts. 1WO Kalai added, "In the urban battlefield, the enemy can fire at anywhere from buildings. If our soldiers are without a protected platform, they'll be like sitting ducks. The Terrex ICV effectively protects our soldiers from small arms fire." This sentiment was echoed by MSG Neo who said, "It's great that Infantry soldiers have armoured protection now. We can safely travel to the objective and engage our enemies with more confidence. The section commander can also brief his men about the mission while travelling in the Terrex ICV."

The Terrex ICV does more than just transport our troops into battle. It is equipped with a Weapon Detection System (WDS) to detect the source of the enemy's fire using soundwaves. Upon detection, the Remote Control Weapon System will automatically target the enemy and fire on command. 1WO Kalai explained, "Previously, the enemy could fire at me from anywhere and I wouldn't know where he was located. I'd have to hide and look for him at the same time! The Terrex ICV enables us to quickly locate the enemy and share this information in the BMS, and fire back at him. It's really effective!"

Fusing Operation and Technology

While it is evident that the introduction of the Terrex ICV marks a significant milestone in the 3rd Generation transformation of our Army, this vehicle would not have been possible without the strong tripartite relationship among our Army, DSTA and Singapore Technologies Kinetics.

Mr Sunil Sadanandan, Programmes Manager from Defence Science and Technology Agency (DSTA) had

nothing but praise when asked for his thoughts on working with the Army. He said, "The Army is a very professional and knowledgeable organisation and it was a pleasure to work with it. LTC Oh Beng Soon, who was the operations manager for the development project, was constantly on his toes providing all the necessary support."

LTC Oh from 9 DIV/INF shared on the challenges involved in bringing this project to fruition. He said, "Designers and engineers from ST Engineering and DSTA worked intimately with operationally-minded users from the SAF to share ideas and integrate operational needs with technological possibilities. Both operational requirements and technology 'pushed and pulled' each other along to produce a mission-effective, top-of-the-line Terrex ICV. The pre-production model vehicle underwent numerous performance and reliability tests and was converted to numerous variants to check integration and functionality. Given the nature of the project, the pace was indeed very impressive."

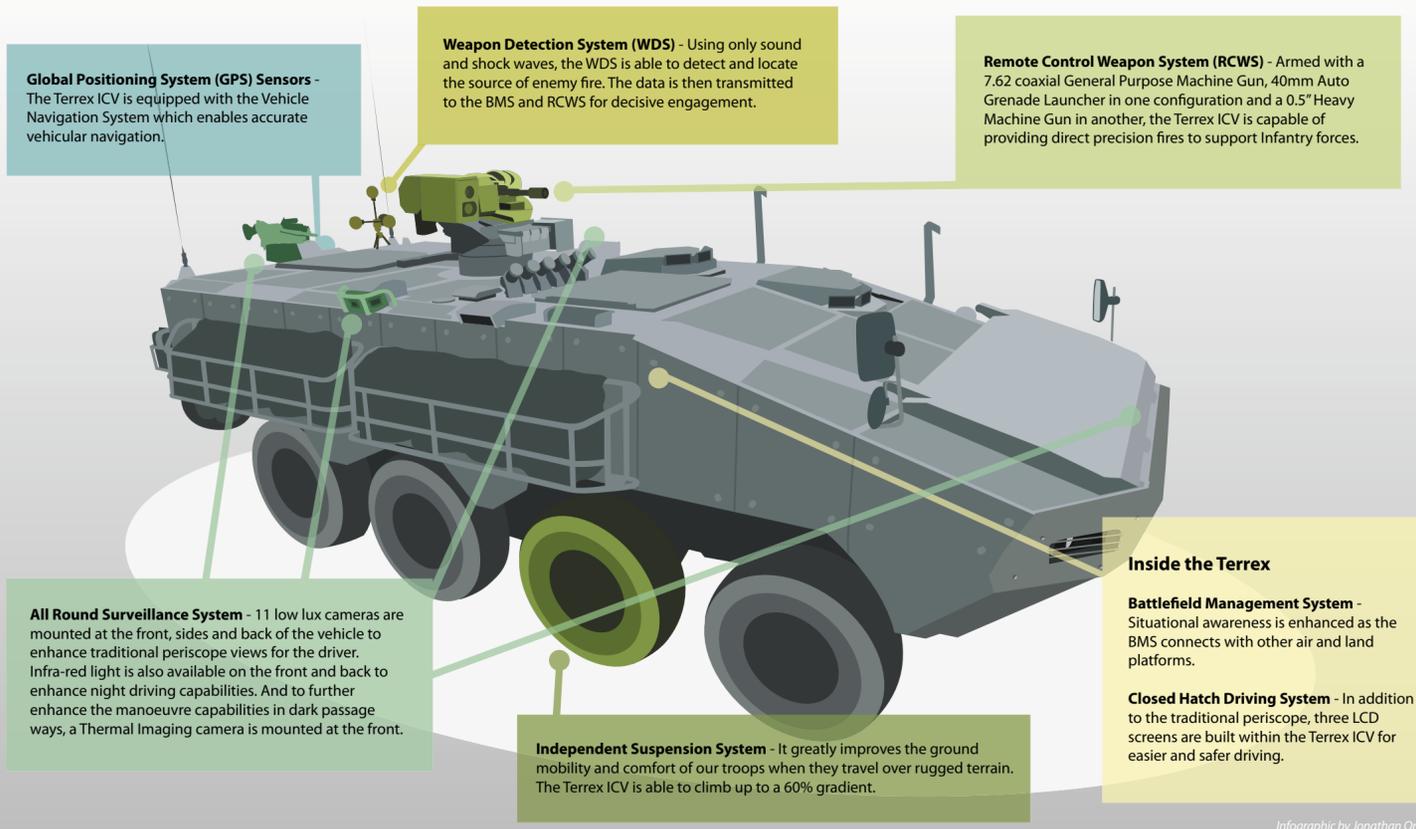
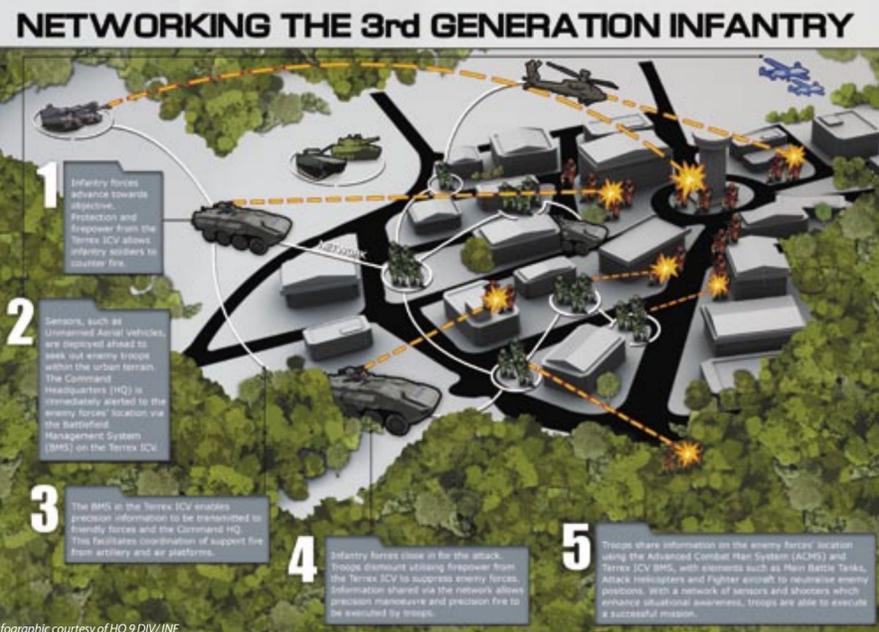
Forging Ahead with the Old and New

Although the Terrex ICV has given our Infantrymen a quantum boost in their fighting capabilities, the importance of basic soldiering skills remains key. 1WO Kalai noted, "Everybody still has to go through the Basic Military Training. Everybody will still have to do their route marches. Soldiers must have their combat fitness no matter what. The Terrex ICV will simply complement their basic soldiering skills, and not replace them."

Training will begin in February 2010 for selected infantry battalions and the first operational Motorised Infantry Battalion will be ready by end 2010.

Launch of the Terrex ICV

On 21 August, the Terrex ICV was rolled out and unveiled by Chief of Army, MG Neo Kian Hong at the 5th Anniversary celebrations of 9th Singapore Division/Infantry in Selarang Camp. Witnessed by the Army Leadership Group and NSmen who were back for their In-Camp-Training, the unveiling of this latest platform on this befitting occasion underscored how much our Infantry has progressed over the years. On 5 September, the Terrex ICV was officially launched by Deputy Prime Minister and Minister for Defence Teo Chee Hean at the Army Open House 2009. Its presence at "Combat World" provided the public with a first hand insight into its many features and capabilities.

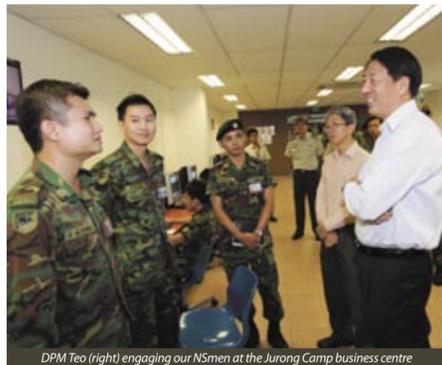


Recognising NSmen with More Perks

Story by Marcus Ho / Photography by Wan Zhong Wei

"The Government recognises the key role that National Servicemen play as the main fighting force in our national defence. The contributions and sacrifices of our National Servicemen have allowed us to maintain continued peace and security over many decades." Deputy Prime Minister and Minister for Defence Teo Chee Hean said this as he announced the Government's acceptance of all 18 recommendations by the RECORD V (Fifth Committee to Recognise the Contribution of Operationally Ready National Servicemen to Total Defence) committee at Jurong Camp II on 11 September.

Following the convening of the RECORD V committee in March, the committee held extensive discussions and



DPM Teo (right) engaging our NSmen at the Jurong Camp business centre

consultations with NSmen, spouses and employers, and visited several In-Camp Trainings (ICTs). Through its deliberations, five key considerations that would impact its subsequent recommendations were identified: rising aspirations, importance of leadership, encouraging fitness, globalisation and increased work demands, and building cohesion.

To meet rising aspirations and better recognise NSmen's contributions as they gain more years in their Operationally Ready National Service (ORNS), more frequent and larger increments in rank allowances will be given. NSmen in combat vocations will also benefit from increased combat allowances. LTA (NS) Jason Chen, Officer Commanding from 696th Battalion, Singapore Infantry Regiment welcomed these benefits. He said, "I think it's a good symbolic gesture to recognise the efforts that NSmen put in for their NS commitments. NSmen usually have a lot of other commitments like their families and careers. So it's really a sacrifice for us to put all of them on hold for two to three weeks during our ICTs."

Commenting on the second key consideration, Associate Professor (A/P) Koo Tsai Kee, who chairs the RECORD V committee said, "In view of the important roles that specialists and warrant officers play in the SAF, the committee felt that their allowances should be increased." To this end, add-on allowances for NSmen holding command appointments will be introduced. LTA (NS) Chen enthused, "As commanders, we sacrifice a bit more than our men. For example, months before the ICT, a lot of time and effort is spent in meeting up with the other commanders to coordinate the administrative work and

plan the training for our battalion. I believe a lot of NSmen will be very grateful for this benefit!"

The RECORD V committee also recognised the challenges NSmen faced in maintaining their physical fitness amidst their busy lives. As such, IPPT fitness corners and better training equipment will be provided in the heartlands. This recommendation was mooted by RECORD V member and Deputy Speaker of Parliament, Ms Indraneel Rajah, who had a taste of training for the Individual Physical Proficiency Test (IPPT) [see Army News Issue 154 for story]. She recounted, "Having to train for IPPT made me realise that it wasn't easy to look for training facilities after work. There must be something that we can do that gives our NSmen easier access to such training facilities." LTA (NS) Samuel Choo, Platoon Commander from 662nd Guards Battalion said, "I usually train after work since the gym is near my office. However, when I'm not in office and feel like training for the IPPT static stations, I would have to travel to the gym which is far from my home. So if there is a fitness corner in my area, that will be a great help indeed."

NSmen who often have to balance their urgent work commitments with their military training during ICTs will also welcome the recommendation to further enhance the camp business centres with wireless internet access. They will also be allowed to bring into camps their company-configured laptops, Blackberries and Personal Digital Assistants for use during non-training hours.

The full recommendation report of RECORD V can be found online at www.mindef.gov.sg/record

Army Engineering

Creating Capacity, Lowering Cost

Contributed by HQ MES

It is a little known fact that the first shot fired in Singapore from the Leopard Main Battle Tank (MBT) was by a technician. As part of the Leopard's refurbishment before its delivery to the SAF, its firing components were dismantled for inspection. To ensure the full functionality and safety of the mechanical firing system, engineers from the Maintenance & Engineering Support (MES) Formation inspected the Leopard and remotely fired its main gun.

This little-known but important task vividly illustrates MES' value-added roles and contribution to our 3rd



DS(A) (second from right) and Director Defence Finance (centre) being briefed on the various MES initiatives

Generation Army. This and many other examples were shared with Deputy Secretary (Administration) [DS(A)], Mr Willie Tan, and Director Defence Finance, Mr Ng Cher Pong during their visit to HQ MES on 31 August. In his brief on the active involvement of HQ MES in developing and acquiring Army platforms, CPT Ong Chong Yao, Staff Officer Combat Vehicle Branch of HQ MES, also highlighted the various efforts in reducing their Operations & Support (O&S) costs.

One example shared by CPT Ong was the locally-developed purging kits for the Leopard MBT's sighting

system. By eliminating fungus growth through the removal of moisture in the system, these purging kits have improved the reliability of the sighting systems. The Army has achieved a cost avoidance of more than \$1.2 million as less corrective maintenance is now required. On-going efforts to improve the Leopard's track pad also appear promising, and are expected to cut costs by 50% and increase durability by 75%.

SSG Lim Wee Siang and 2WO Vivian Loh, technicians from 6th Army Maintenance Base (6 AMB), showcased the support MES has provided to the operation of the Mini-Unmanned Aerial Vehicle (Mini-UAV). They exemplify the diversity and depth of Army Engineering, a major success factor in the rapid introduction and smooth deployment of UAVs in the Army.

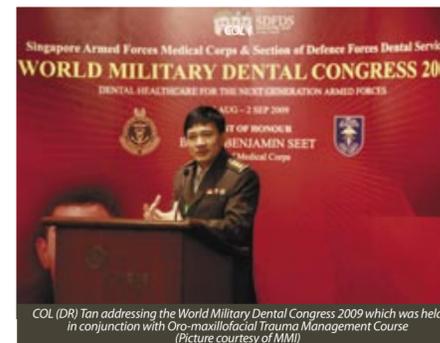
At the end of his visit, DS(A) was impressed by the various cost reduction initiatives. He commented, "Though we have been fortunate to have been given a healthy budget year after year, we cannot let up on the financial discipline and prudence that we have exercised up to now. We must therefore continue to look for the most cost-effective way to develop our capabilities."

DS(A) also acknowledged that an Army Engineering career is an exciting and challenging one, as greater technical, engineering and maintenance support capabilities will be needed to support our 3rd Generation Transformation. With the coming introduction of the Military Domain Expert Scheme (MDES) in the SAF, HQ MES is looking forward to raising its maintenance and engineering support to an even higher level of professionalism and excellence.

The Faces of War

Story by Samuel Cheam / Photography by Jonathan Ong

Go prone! That is the instinctive reaction of any soldier under enemy fire because it reduces his profile and makes him a harder target to hit. Unfortunately, even in that position, one part of his body remains exposed – his face. Battlefield survivors with facial wounds suffer from severe loss of facial structures like the jaws, teeth and lips as well as burn injuries to the ears and nose. Such extensive facial injuries are rarely seen in civilian trauma and pose a challenge for military dental surgeons.



COL (DR) Tan addressing the World Military Dental Congress 2009 which was held in conjunction with Oro-maxillofacial Trauma Management Course (Picture courtesy of MMI)

In light of this, the Military Medical Institute (MMI) together with the US Army Institute of Surgical Research organised the Oro-maxillofacial Trauma Management Course from 29 to 30 August. Held at the SAF Medical Training Institute, the course was attended by 15 NSmen oral surgeons and dental officers from the Army Combat Support Hospital and Forward Combat Service Support Battalion.

The presenters included COL Robert Hale, Commander designate of the US Army Institute of Surgical Research and MAJ James Lussier from Landstuhl Regional Medical Centre, Germany. Both oral surgeons have extensive experience in treating facial injuries in Iraq and Afghanistan. Their sharing was extremely useful to our NSmen dental officers as COL (DR) Tan Peng Hui, Commander MMI explained, "Most facial wounds are ghastly to see and are complex puzzles which oral surgeons have to solve quickly with lives hanging in the balance. The conflicts in Iraq and Afghanistan have brought new perspectives in the treatment of facial injuries. This course enables us to learn from those perspectives."

During the course, participants also learnt more about Disaster Victim Identification techniques taught by COL (DR) Tan. They gained an insight into the methods of

identifying bodies through dental anatomy. Such skills are critically needed to identify casualties in war or in peacetime tragedies like the 2004 Boxing Day tsunami.

The course was certainly a unique opportunity for our NSmen dental officers. CPT (NS) Dr Goh Siak Shyong from 2nd Combat Support Hospital shared, "As an Oral & Maxillofacial surgeon, I already manage facial trauma and fractures on a regular basis. Learning first hand from these veterans about the severity of wartime injuries has inspired me to bring my field surgical management to a higher level so that I can be up to the task when the need arises."

The Oro-maxillofacial Trauma Management Course is the latest in a series of courses regularly conducted to enhance the professionalism of our NSmen dental officers. Another participant, CPT (NS) Daniel Tang from HQ Guards reflected on the importance of such courses, "Oral surgery is very relevant in the modern military context and as reservist dental officers, we're not out in the field full-time, so it's important that we're updated in this area."



CPT (NS) Tang found the Oro-maxillofacial Trauma Management course useful in keeping his skills up to date

NSmen Learning at the Forefront

Story by Chia Han Sheng / Photography by Wan Zhong Wei

The phrase "Learning Army, Thinking Soldiers" articulates one of the hallmarks of our 3rd Generation fighting force. It connotes a culture of flexibility, openness in thinking, and a readiness to constantly improve. Civil Military Relations (CMR) is an important area of development that has demonstrated our Army's ability to learn fast from conflicts happening around the world. As its name suggests, CMR serves as the vital interface between the military and civil dimensions in operations. These relationships have grown in importance as operating theatres become more complex due to the heavy presence of civilians in urbanised areas.

CPT (NS) Lim Han Boon is a staff officer in the 10th Singapore Infantry Brigade, assisting the Brigade Commander to address Civil Military issues. His tasks include integrating measures that minimise collateral damage to civilians and reducing civilian interference in combat operations. CPT (NS) Lim had the opportunity to hone his skills with soldiers from the US Army in this year's locally held Exercise Tiger Balm. The exercise saw both armed forces working side by side to overcome a simulated enemy.

During the exercise, CPT (NS) Lim and his team had many opportunities to learn from the operational experiences of their American counterparts. He reflected, "Looking at what happened in real operations and the lessons learned from Afghanistan and Iraq, the Americans shared their professional

experiences and knowledge with us readily. CMR is not something that grew out of thin air, it came into mainstream thinking because it's the situation on the ground."

CPT (NS) Lim is passionate about his NS commitments. As the Chief Operating Officer of an international firm, he spends 75 percent of his time in China. With such heavy overseas commitments, he revealed that the 3-week long In-Camp-Trainings (ICTs) are the longest stretches of time that he has spends in Singapore. This has not diminished

his sense of belonging as CPT (NS) Lim shared, "My time in China is just for my job. It gives me a perspective of what is outside Singapore but my heart is still here. This is where I still want to spend the rest of my life." CPT (NS) Lim has even extended his NS commitments beyond the 10-year cycle because he believes strongly in NS. He shared, "It is true that our NSmen are at the forefront of new developments and that we are receiving the proper training for it. This is important because ultimately, NSmen form the bulk of our defence force."



Commanders from the Singapore Army and the US Army learning from each other in Exercise Tiger Balm (Picture courtesy of HQ 9 DIV)

Every Life is Precious

Story by Ian Cheong / Photography by Samuel Cheam

20 August started off as just another working day for the medical team from Pulau Tekong Medical Centre. CPT (DR) Wu Ying Jie, a Medical Officer (MO), was attending to the "reporting sick" personnel while medics 3SG Hariz, LCP Amit Singh, LCP Chua Shien Hon and PTE Shankar performed their assigned duties around the medical centre. Very soon, it was lunch time. However, this was no ordinary lunch break as an unfolding medical emergency soon turned their remaining office day from "usual" to "memorable". At 1257 hours, CPT (DR) Wu requested for a heli-casualty evacuation (heli-casevac), and 20 minutes later, a Super Puma roared into the island. The patient was flown to Singapore General Hospital (SGH) for further treatment.

Earlier that day, Mr Zambri Bin Muhammad Dom, a Public Utilities Board contractor working on the island, was brought to the Medical Centre by his colleagues, where he was attended to by LCP Singh and LCP Chua. They quickly observed that his blood pressure was very low and that he had problems maintaining balance. After wheeling him into the resuscitation room, they alerted CPT (DR) Wu, who had just returned from his lunch. Mr Zambri complained about his giddiness, hand numbness and chest tightness. These, coupled with his low blood pressure, were symptoms strongly indicative of a heart attack. The medical team knew that they had to act fast in this situation. 3SG Hariz recalled, "At first, it didn't seem very serious because he was still able to walk. But after he showed signs of distress and CPT (DR) Wu diagnosed his condition as a heart attack, we went into adrenaline mode. We knew how serious the situation was."



From left: LCP Singh, PTE Shankar, LCP Chua and 3SG Hariz were relieved that they managed to save a life in the course of their duty.

Once the electrocardiogram results confirmed the diagnosis, Mr Zambri was placed on continuous parameters monitoring and oxygen was administered. He was put on a drip to restore his blood pressure and medication was administered to slow the progression of vessel blockage. Concurrently, defibrillation pads were placed over the chest in case the patient developed abnormal heart rhythms. While the patient was being stabilised, CPT (DR) Wu and a duty medic started making the necessary arrangements for the heli-evacuation. At 1331 hours, a mere 34 minutes after the heli-casevac was requested, Mr Zambri arrived at SGH where he was given treatment.

For the medical team, their swift and professional handling of this incident has certainly validated their rigorous training and daily work processes. Their daily work in the medical centre may appear routine, but the duty teams never stop refreshing themselves on the various emergency drills. 3SG Hariz shared, "Every morning, before the duty team takes over from the previous day's duty team, we conduct emergency drill exercises for the 4-man team. Different scenarios are given and the team will have to react accordingly. After which, After-Action Reviews are conducted."

CPT (DR) Wu added, "Pulau Tekong Medical Centre is one of the busiest medical centres in the SAF and this is the reason why we emphasise a lot on emergency drills. These drills ensure that our medics on duty are always ready to receive any casualty in need of treatment. The recent incident clearly demonstrated how our medics proceeded with their well-oiled 4-man drill and attended to the patient swiftly. Protocols developed are to preserve life and limb, and coordination with external resources allows us to save time, and in so doing, allow for a quicker response"

While medical emergencies are not daily occurrences, the medical team is always mindful that every single human life is precious. 3SG Hariz reflected, "Even though it's a relief that we managed to save a life, we must always bear in mind that every patient has to be taken seriously. Even though this was a more serious condition, treating it fast, treating it well just meant that we did the right thing - that we did our job well, carried out the right procedures and fulfilled our duty as medics."

Raising Our Chemical Defence Capabilities

Story by Chia Han Sheng / Photography by Wan Zhong Wei

Disfigurement, paralysis, birth deformities and even fatalities. These are the horrors suffered by chemical warfare casualties during the Iran-Iraq War. After the war ended in 1988, the SAF immediately recognised these threats and embarked on developing chemical defence capabilities to combat them. The latest fruits of this 20-year development were shown at the Army Open House 2009 as soldiers from the Chemical, Biological, Radioactive and Explosive (CBRE) Defence Group demonstrated their ability to deal with a myriad of chemical threats.

Partnering For Success

The state-of-the-art capability that we have today has not come easily. Personnel from our Army and the DSO Laboratories (DSO) have been working tirelessly to ensure that we remain on the cutting edge of Chemical Defence

developments. Commander CBRE Defence Group, COL Lee Hoek Chye certainly knows all about this. He recounted, "The DSO and the SAF's chemical defence programmes started hand-in-hand. Personnel from the DSO and the SAF were sent overseas in the initial years to pick up the essential knowledge and skills before returning to chart out the SAF's chemical defence programme."

Ms Sng Mui Tiang, the DSO's Chemical Programme Director (CBRE) was also a pioneer in the DSO's chemical defence programme. She shared, "The chemical weapon threat was quite unknown at that time. We did not know what it entailed to make such a weapon, what the effects would be and how we should protect ourselves against them." Since then, the DSO has been a key partner in our defence ecosystem, supporting our Army's chemical defence programme with its technical expertise, innovation and research.

To further underscore the strong ops-tech relationship, several DSO Scientists are serving their NS commitments under the CBRE Defence Group. CPT (DR) (NS) Loke, Head Medical Countermeasures (Chemical Defence) at the DSO is one such NSman. He shared, "Most scientists don't have many opportunities to understand what the SAF does in the field. When we work closely with the CBRE Defence Group, we get to see what the problems in the field are. This enables us to propose ideas that can better enhance the operations."

Hardware Developments

The CBRE Robotics Suite is one example of how our Army and the DSO have worked together to develop a hi-tech capability. This suite of robots are programmed to perform multiple functions such as detection, decontamination and sample collection. By utilising robots and remote detection systems, our Army minimises our soldiers' risk of exposure



Commander CBRE Defence Group COL Lee Hoek Chye

to harmful chemical elements. Ms Sng explained, "The Army wanted to know how a technical platform would perform against some chemical agents. That is where we came in because we did the research and evaluation which ultimately affected their procedures and protocols."

In fact, the DSO often evaluated commercial platforms and subsequently modified them to meet the CBRE requirements of our Army. COL Lee reiterated, "Most of the SAF's Chemical Defence (CD) equipment are procured in consultation with the DSO who conduct evaluation of a wide range of equipment in the market."

Continuing to Build for the Future

Besides developing innovative hardware capabilities, the relationship between our Army and the DSO has also encouraged close knowledge sharing. To be held in December this year, the 6th Singapore International Symposium on Protection Against Toxic Substances (SISPAT) and the 2nd International CBRE Operations Conference (ICOC) will be jointly organised by the CBRE Defence Group and the DSO. These conferences will enable scientists, military and industry professionals to share their latest knowledge on defence against unconventional threats.

As the DSO and our Army celebrate 20 years of jointly raising their capabilities in chemical defence, their efforts will without a doubt, continue relentlessly. After all, being fully prepared and staying ahead is our best defence against these threats.



Our CBRE forces dealing swiftly with a chemical threat

Running For Life

Story and Photography by Ian Cheong



LTA (NS) Keynes Lee doing what he likes best

Steve Prefontaine, the legendary American middle-distance runner once candidly shared, "You have to wonder at times what you're doing out there. Over the years, I've given myself a thousand reasons to keep running, but it always comes back to where it started. It comes down to self-satisfaction and a sense of achievement."

LTA (NS) Keynes Lee from 9th Singapore Division/ Infantry (9 DIV/INF) is one such runner who is motivated by these reasons. He said, "Long-distance is honestly a test of endurance and perseverance. Every time I run a longer distance, I push the pain threshold one rung further. Each time I clock in a new personal best, I am motivated to just keep on going, to keep reaching a new achievement." LTA (NS) Lee's running passion paid handsome dividends when he was part of the championship-winning 9 DIV/INF team in the 10-kilometre competitive run category at this year's Army Half Marathon (AHM). He reflected, "I wasn't the fastest in the team, but after all, it was a team effort and as a team, we really did endure the sacrifice, fatigue, pain and tough training together."

LTA (NS) Lee shared on the sacrifice, fatigue, pain and tough training involved in his preparation for the AHM. On Saturday mornings, he trained with his teammates from the division at East Coast Park. He said, "Training wasn't easy. Running your lungs out for 10 kilometres, going for your personal

best and then continuing on with strength training is very tiring! But the good thing about being in a team is that every time you feel tired, every time you don't feel like training, there is someone behind you who will spur you on and encourage you to finish." Indeed, LTA (NS) Lee's desire to push his limits and press forward during his runs was partially inculcated during his Officer Cadet School (OCS) days. He shared, "The training and rigour in OCS gave me the mental strength to finish every run I set out to do. Each time I set out to run a longer distance, it was precisely this mental strength that would keep me pressing forward."

Convinced that long-distance running has made a difference in his life, LTA (NS) Lee hopes to make a similar impact on the lives of others. Currently pursuing a Bachelor's in Education at the National Institute of Education with Physical Education as the main teaching subject, LTA (NS) Lee explained, "Personally, I would want to make a difference in people's lives. Teaching physical education allows me to incorporate my love for sports with this desire."

For those interested in long-distance running, LTA (NS) Lee's advice is to start small. He said, "Don't start out wanting to run a marathon. Go for short runs first and then progressively cover longer distances. You will eventually want to push your limits and break the pain barrier."

From Boy to Man

Contributed by 41 SAR

"Thank you for transforming my son from a boy to a man." These were the first words that Mr Tay Gim Joo said to LTC Yew Chee Leung, commanding Officer 41st Battalion, Singapore Armoured Regiment, on 9 September when his son, PTE Gavin Tay passed out from the unit's Basic Military Training (BMT). Mr Tay, himself a recruit in 41 SAR in 1975, recalled the harsh training and austere living conditions. He shared, "Then, things were not always

explained clearly to us and hence sometimes, we did not know what we were doing." Thirty-four years later, he was struck by the vast changes enjoyed by his son, especially the improved living conditions and the safe and progressive training system adopted.

Mr Tay was pleased with the positive changes in his son after his military training. He grew stronger physically and mentally within a short time. He explained, "Before enlistment, my son was not able to do a single pull-up but now he comes home beaming with pride after passing his IPPT." Through the night-time phone chats, Mr Tay was assured to hear that his son was coping well with training and was finding the experience meaningful. He said, "I am grateful for the encouragement and support that the commanders have given to my son. 41 SAR has laid his soldiering foundation and also prepared him for life after NS. Now, I am proud to say my son is also from 41 SAR!"

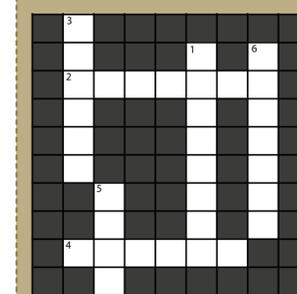


A proud moment for REC Tay as he posed with his parents after his graduating from BMT

Quiz Of The Month - AUG / SEP

Send us the correct answer and win a pair of Golden Village movie vouchers. There will be 5 winners!

Q: Closing Date : 12 November 2009



- Across**
- The Terrex Infantry _____ Vehicle is equipped with the Battlefield Management System.
 - Our medics from Pulau _____ Medical Centre saved the life of a PUB contractor.
- Down**
- COL Mark Tan is the new Commander 3rd Singapore _____.
 - _____ V's recommendations were accepted by the government.
 - The Army _____ House was held from 3 to 7 September.
 - The Ultimate _____ Learn 2 Play clinics are organised by SAFSA.

Rank / Name: _____
Unit: _____ E-mail: _____
NRIC: _____ Contact No: _____

- This contest is open to all Army personnel except the executive staff of Army News Section.
- Each person is allowed one entry.
- Prizes are not exchangeable for cash. Winners can either collect their prizes from Army News or arrange for mail delivery.
- The judges' decision is final. Please send us your entries via mail or email us at armynews@starmet.gov.sg.
- Prizes not collected within a month of notification will be forfeited.

JULY / AUG Quiz			JUL / AUG Winners		
A: 1. Floating	4. Marathon	NRIC: S1000783G	1) REC LEE GUANG JUN		
2. Brackets	5. Aden	NRIC: S1000174A	2) 3SG (NS) KOH SENG KEE		
3. Ecosystem	6. Temasek	NRIC: S1000224C	3) 3SG (NS) CHEW BOH HUA		
		NRIC: S1000048B	4) MS ONG SHU HWEI		
		NRIC: S1000092E	5) 2WO TAY BOON TECK		

Winners are to contact Army News at 6427 0642 for collection of prizes.

Info Nuggets

Play Ultimate Frisbee!

Story by Chia Han Sheng / Picture courtesy of SAFSA

Do you have the urge to run like the wind, jump for the stars and leap like a gymnast all at the same time? If you do, then Ultimate Frisbee is the sport for you! The SAF Sports Association (SAFSA) has been organising a Learn-to-Play (LTP) Programme for personnel interested in the sport. Professional instructors are engaged to impart basic techniques to participants during a 90-minute session. In fact, the sport has proved so popular that 20 units signed up for the programme during its first three months.

Besides the units, the programme has also attracted participants and trainees from various SAF courses. MAJ Tay Kwang Leong who was undergoing his Battalion Tactics Course shared, "During the course, we have allocated fitness times and we were thinking of how to make it fun instead of just doing the mainstream games or running. As commanders, we like ultimate frisbee because it is enjoyable and can also be brought back to our units." CPT Eric Lau, another course participant echoed, "I think this game is very fun, it builds up team bonding and is also a strategy game. The instructors were also very professional. They gave some tips on throwing and educated us on the rules. If you want to develop cohesion and bonding in a team, this is a good way to start."

These objectives were exactly what the organisers of the Ultimate Frisbee LTP Programme hoped to achieve. Ms Veronica Teo, a SAFSA Sports Development Executive



Ultimate Frisbee is both a physically demanding and an enjoyable way to build team cohesion

reflected, "Frisbee is gaining popularity at a national level. It is a mixed-gender sport that encourages team bonding and participation from the masses. Everyone starts from the same level because they are learning a new sport. Ultimately, it helps to promote a culture of fitness in a fun way."

If your unit is interested to take part in the programme, contact Ms Veronica Teo from SAFSA at 6410 5729 for more details. SAFSA will provide the necessary equipment and registration is free of charge.

G1 Army Family Day @ Seletar

Contributed by G1 Army

The quaint Lighthouse Mess in Seletar Camp oozes nostalgia, reminiscent of the days when the British forces were based here. Standing on the nearby slipway, one can still almost hear the roaring engines of the RAF Sunderland flying boat as it lumbered up from the sea after a patrol. But on this 10 September morning, members of the G1 Army family laid on this concrete slipway for a telematch to decide which Human Resource organisation could form the longest human chain. This and many other fun-filled activities marked the annual G1 Army Family Day-cum-Anniversary, which seeks to strengthen the ties among its units.

The day started off with an impressive demonstration of the Mobility 3rd Generation Military Float Bridge by the Singapore Combat Engineers. After Assistant Chief of the General Staff (Personnel), COL Tan Chong Lee, had addressed the gathering, the fun began in earnest. Besides

the telematches, there was also a physically challenging Bicycle Treasure Hunt in which participants raced around Seletar Camp in search of clues. For those who preferred less strenuous activities, a mahjong competition was held. The children also enjoyed an art competition and magic show.

A sumptuous buffet lunch of local favourites such as laksa and popiah replenished the energy spent. Mooncakes made during a workshop conducted earlier in the mess were served to cap off a truly memorable time which undoubtedly has further strengthened the bonds within the G1 Army family.



Many fun-filled activities marked the annual G1 Army Family Day-cum-Anniversary



"All the training, practice runs and drills come together in an instant when you are faced with a real casualty."

"I started with the army when I accepted the scholarship offered to me under the Joint Polytechnic-SAF Diploma Scheme (JPSDS) in 2001. Since then, I've done a lot of things. As a combat medic I've spent time in the infantry, trained as a paramedic and served overseas in Indonesia and Afghanistan. After my tour in Afghanistan I was posted to SAF Medical Training Institute as an instructor. I am honoured to represent my country and the SAF in overseas missions and this has opened my eyes to the world. I don't think any other scholarship or company could have offered me all of this. I'm grateful about it."

You can read the full version of this story and find out what real soldiers have to say about life in our Army @ facesofsteel.army.gov.sg

FACES OF STEEL. STORIES OF STRENGTH.
ONE ARMY. MANY OPPORTUNITIES @ [FACESOFSTEEL.ARMY.GOV.SG](https://facesofsteel.army.gov.sg)



I now have a better feel of the kind of weapons that my son will be using. The whole set-up seems very comfortable, they even have helmet lining!

JUNE CHUA



After taking part in the obstacle course, I realised that my fitness is dropping and I'm motivated to train harder

3SG (NS) JUN SENG



The AOH was very comprehensive, it showed us many different aspects of the Army and how it works.

Yek Tiew Ming

ARMY OPEN HOUSE 09

armynews supplement



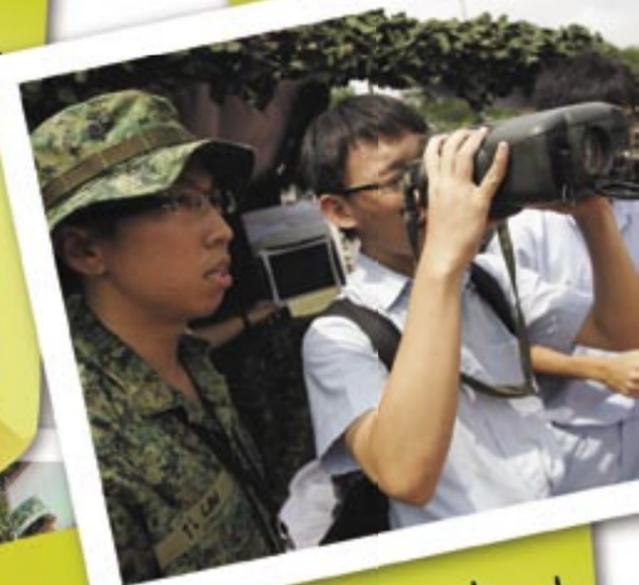
It was my first time on the flying fox and it was so exciting!

- Iris Chong



With deployments for humanitarian aid and overseas operations, and its responsiveness to H1N1 Bird flu, Singapore has been a classic example for the rest ASEAN.

Raman Venkateshwaran



I saw how much dedication the army guys put in to protect us and protect our country and it helps me understand their tough training and army life.

Joreen Chua

The soldiers at Adventure Land were very patient with us. They did the demonstrations so many times and overcame the obstacles as well!

Xavier Lee

When I was in my active days, things weren't so 3G and there was a lot of manual work.

2SG (NS) Chen Aik Leong,
56th Singapore Armour Brigade



AOH 2009 - Feel and Touch Our 3rd Generation Army

Story by Chia Han Sheng / Photography by Wan Zhong Wei & Jonathan Ong & Chia Han Sheng

What does the 3rd Generation Army look like? How does it feel, sound and operate? From 3 to 7 September, close to 80,000 people thronged the Army Open House (AOH) 2009 to get a glimpse of the latest developments in the 3rd Generation Army. The experience was certainly a sensory feast, with our Army's networked capabilities, fighting concepts and history captured in seven interactive Worlds.

Each of these segments, known as Fun World, Action World, Future World, Mission World, Combat World, Battle World and Our World aimed to showcase a different facet of our Army. Visitors enjoyed diverse experiences ranging from the devastating firepower of our armoured platforms to the virtual realm of our Army's state-of-the-art training simulation. With such an exciting list of activities to do, even the Army News reporting crew had a blast at the AOH. If you missed this year's AOH, our special coverage will leave you waiting impatiently for the next one.

Combat World: Might and Steel

Hollywood war movies may realistically depict the might of military vehicles but nothing compares to placing your hands on an armoured platform and feeling the thick, hot steel beneath your fingers. When you actually come up close to a behemoth like the Leopard Main Battle Tank or the solid flails at the rear of the Trailblazer Counter-Mine Vehicle, all forms of childhood fascination are sure to re-emerge. At the Combat World, visitors got to climb on board our Army's impressive platforms which included the



Getting a hands on experience with our Army's weapon systems



Evelyn Gan unleashing her firepower on the simulated enemy

newly launched Terrex Infantry Carrier Vehicle (see this issue's Cover Story for more) and the Apache Attack Helicopter.

All this hardware will need highly trained people to maximise our new capabilities. The AOH therefore showcased the latest in training simulation. The Infantry Gunnery Tactical Simulator was opened to the public for the first time, enabling both young and old visitors to experience its realistic virtual training scenarios. Evelyn Gan from Raffles Girls Secondary School quipped, "The simulation was really exciting and realistic! It really is very high-tech and I got a better taste of what Army training is like."

Battle World: Integrated Attack Force

Our 3rd Generation Army is not just about new and powerful platforms, it is also about our ability to network these assets together to form one integrated attack force. The Battle World showcased this seamless integration, taking visitors through an experiential battlefield scenario.

Battle World's Live Firing Safari began in a Command Post where visitors observed reconnaissance video footage from an Unmanned Aerial Vehicle and received a brief on the mode of attack. They then piled into the trusty 5-tonners and followed a host of combat platforms into battle. Along the way, they watched the nifty Light Strike Vehicle cross water obstacles and engage hostile enemy speed boats. The Primus from Singapore Artillery was also called into action, providing precision fire onto the simulated enemies. MAJ (DR) (NS) Chong Yew Lam who came with his family



Staring down the 120mm barrel of the Leopard Main Battle Tank is something you only get to do at the AOH



The Combat Ride Safari was a hot favourite at the AOH

exclaimed, "We saw really impressive firepower capabilities! While we always hear about the 3rd Generation in theory, today's experience has certainly shown us some realism to the idea."

Future World: Experiencing the Future Now

Even as we operationalise the 3rd Generation Army, the need to develop technology for the next generation of soldiers continues. Our Army's Defence Ecosystem Partner DSO Laboratories was on hand to share with the public their latest developments. One new gizmo on display was the Load Carriage Assistive Device. Using prosthetic limbs which are strapped onto the soldier, the device effectively relieves a significant amount of load from the soldier's body.

Mr Joseph Ong who visited the display was thoroughly impressed. He said, "It is very necessary to lay some foundation in research for the future generation. The future generation is expected to complete more tasks and it is the right move to start work right now. The AOH has given my kids a glimpse of what is coming up for them."

Future World was also where an intense cyberspace battle was fought. The Army E-Gaming Competition which utilised



Mr Ong (right) and his son learning more about the Load Carriage Assistive Device



The VBS2 was a hit with all the participating teams

the training software "Virtual Battlespace 2" (VBS2) saw 32 Army units battling in a high tempo first person shooter simulation. VBS2, which is akin to many first person shooter computer games, seeks to dovetail military training simulation with the young generation's interest in gaming. 2LT Tan Lan Guan from the victorious Infantry Training Institute team reflected, "VBS2 is very realistic because unlike other games, once your teammates are down you cannot revive them. Our planning and tactics had to therefore be very precise to overcome the enemy."

Engaging Our People for Greater Confidence

As our Army continually evolves to raise its networked capabilities, its people engagement efforts are also on the rise. This thrust was greatly evident during the AOH as special guided tours were conducted for educators, civil servants and students. The educators and civil servants were also invited to attend dialogue sessions with senior commanders.

Mr Lim Peng Hun, a Deputy Principal of Singapore Polytechnic reflected, "The sharing and presentations in the dialogue session were very good. It allowed us to understand the latest philosophy and strategic thinking behind the SAF. Having known this, communicating these messages to the students will be more effective." During these sessions, educators and our senior commanders shared various communication strategies and illuminated our Army's vision for the future.

For Joreen Chua, a student from Republic Polytechnic, the visit to the AOH was an assuring one. She shared, "During my visit, I got to see how much dedication the Army guys put in to protect us. The demonstrations at the AOH have made me feel very safe. I can see that we don't live in fear every day because of the SAF's efforts." Joreen and her schoolmates witnessed an action-packed Urban Operations (UO) demonstration which showed how our Army would recover a building taken by hostile forces.

Zbigniew Dumienski, a Master's student from Poland certainly saw the important role our Army plays in Singaporean



It is often said that our people are the most important part of our Army, and this fact was once again confirmed during the exhilarating journey of organising AOH 09. AOH 09 was about showcasing our 3rd Generation Army and it was about showcasing our people who make our Army Ready Relevant and Decisive. What really made AOH 09 come alive was the pride, professionalism and hard work of all the soldiers who participated in AOH 09. Our people did a great job, as evident in the positive feedback received.

my family how the Army works with the Home Team units to overcome a crisis. "

For MAJ Boieng Cheah, the AOH was a chance to remind his family about the importance of defending our homeland. He said, "The kids and I enjoyed the AOH very much. They love the static displays but I think ultimately, it is important to let them and the public know what we are investing in and remind them of the purpose of national defence."

As dusk approached and AOH 2009 came to a close, each person who contributed to making the event possible could pat themselves on the back for a job well done. CPT Ong Li Lian who was in charge of the Battle Cry station shared, "I remember this one particular boy who came to our station twice a day for all five days of the AOH! I talked to his father who shared that his son enjoyed firing the paintballs and experiencing the Tactical Engagement System very much. Personally, I wanted to deliver a positive experience for both the public and my servicemen, and when the public appreciates our work, my guys feel motivated and happy too."



The UO demonstration showed how our forces will respond decisively during a crisis

society. He shared, "If you look at the armies in Europe, they are not so open compared to the Singapore Army. And I think that is because the Singapore Army has a focus on nation building. I'm really impressed by how professional and welcoming the Singaporean Army has been today."

Army Family Day 2009

If a crisis arises and all your military training is called into action, what will you fight for? "For my country and my family" is what most would say. It was thus fitting that 7 September was also Army Family Day - a time for NSFs, Regulars and NSmen to show their family members what the 3rd Generation Army is all about.

MAJ Sim Kian Hwa from General Staff (Operations) shared, "Getting the family involved is very important as it will help them understand what we are dealing with in the military. The Protection of Installations demonstration that we watched was a very relevant experience because it showed



Our soldiers engaging students from River Valley High School



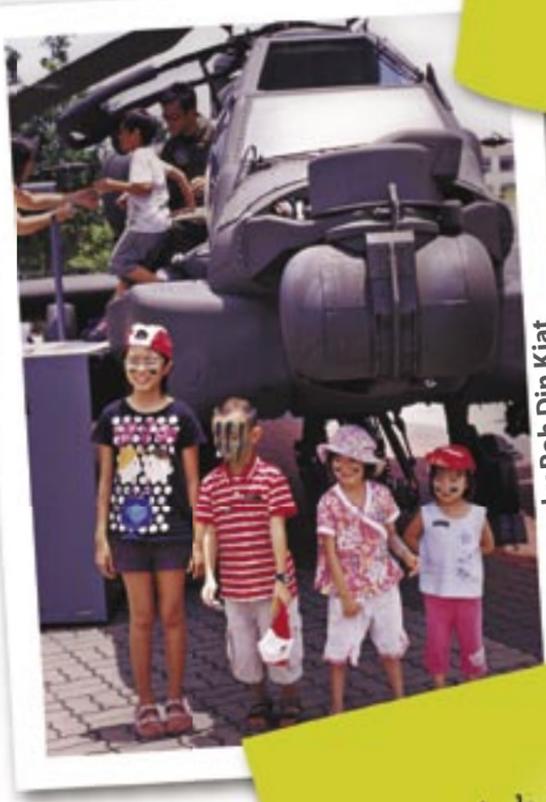
MAJ Cheah and his daughter had a ball of a time at the AOH

COL Ng Kin Yi
Chief Engineer Officer, Chairman AOH 2009

Army News AOH 09 Photo Competition

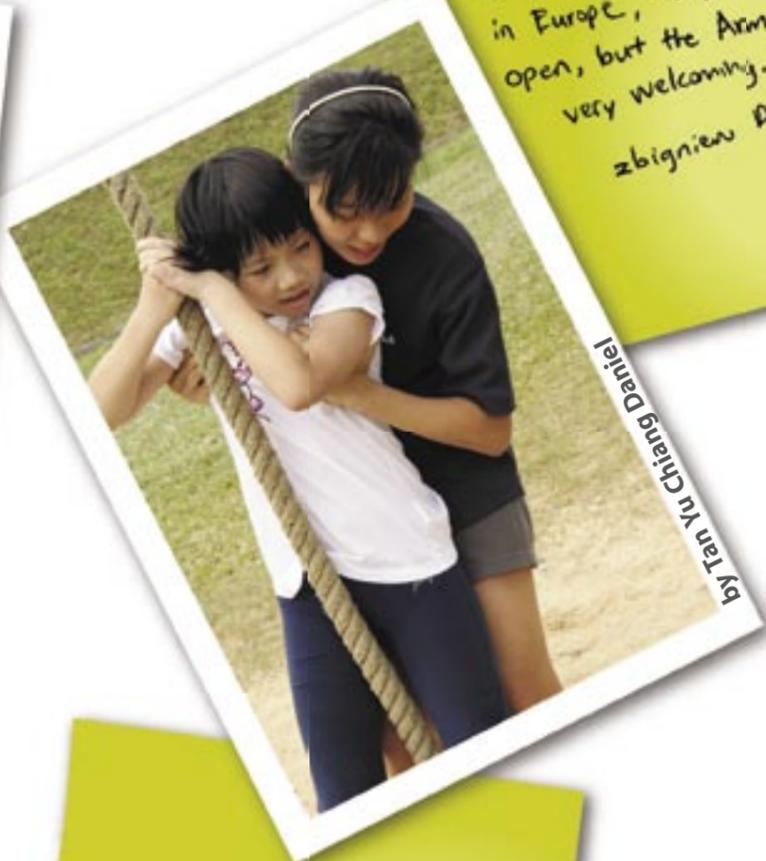
During AOH 2009, Army News held a photo competition with the theme "Family Moments." From the many entries, our team selected the following five winning photographs for their style, composition, message and technical handling.

The first prize winner will be receiving a \$100 shopping voucher from Tangs and an exciting goody bag from the Army Recruitment Centre (ARC). The other four winners will be receiving a \$50 shopping voucher and the ARC goody bag. Kudos to all our winners!



by Poh Din Kiat

If you look at the armies in Europe, they are not so open, but the Army here is very welcoming.
zbigniew Amienski;



by Tan Yu Chiang Daniel

I LIKE AOH, AND ENJOYED MYSELF. THE PEOPLE HERE ARE VERY NICE, AND WERE VERY ENCOURAGING AS I TRIED OUT THE OBSTACLE COURSE.
-SAMANTHA SEAH



by Kenneth Koh

I WAS SURPRISED BY SOME OF THE OVERSEAS HUMANITARIAN MISSIONS WHICH I WAS NOT AWARE OF AND I THINK IT'S IMPORTANT THAT WE SHOW THAT WE ARE ABLE TO HELP OTHERS IN NEED.
PATRICK LAU



by Soh Tam Guan

My boys enjoyed themselves and it was a good chance for them to see what they can expect for US life.
CPT (OP)(US) Marcus Ong



by Eugene Lee Choon Sheng