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"To improve is to change; to be perfect is to change often." - Winston Churchill

Aren't you inspired by this quote though they often say nothing is perfect in this world? Well, I guess we can all still strive to better ourselves, can't we? And that is what we will be sharing about in this issue of Army News - how Our Army innovates to become a more efficient and effective fighting force!

We start off the issue with the commissioning of the Next Generation Armoured Fighting Vehicle - the *Hunter*. Being Our Army's first fully-digitalised platform, this new majestic body is more lethal yet provides greater protection and mobility. Digitalisation will also enhance the way things are being done in-camp. With the launch of Smart Camp in the near future, you can now select your preferred meals at the cookhouse (wow!) and book-in just by scanning your fingerprint.

All these innovations are only possible with brilliant minds inspiring to make great changes. We talked to three teams of servicemen who have incorporated gamification principles to enhance the learning experience of fellow soldiers. Find out what inspired them and the challenges they had to overcome to make the games a success!

In our column on Kopitalk with Commanders, we spoke to the *Encik of Our Army* - Sergeant Major of the Army (SMA) - and found out what he thought about innovation, and what he would have been doing for a living if he did not sign on *(his answer took us by surprise!)*.

We're half year past 2019 (gosh, where did all the time go?!) and I hope it was a great first half of the year for you, if not, you've still got the other half to make the best out of!

J. A.

Clarice Toh Editor, Army News

Psst! We're on a hunt for interesting stories that you might have encountered during your National Service! If you have any, do write in to us at the email address below.

ARMY NEWS

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CONTENTS





















Written By: LCP Gershwin Lim Photography By: PTE Gerald Ng

OUR PREDATORY SPIRIT TO SENSE, TRACK AND PURSUE OUR PREY, AND ABILITY TO HUNT SOFTLY IN A COORDINATED PACK.

Commissioned at the Armour Formation's 50th anniversary parade by Minister for Defence Dr Ng Eng Hen, the Hunter Armoured Fighting Vehicle (AFV) is now a part of Our Army's collection of lethal Armoured platforms. Designed with the modern soldier in mind, the Hunter boasts a fully digitalised platform, revolutionising the way we fight on the battlefield.

REMOTE CONTROLLED WEAPON STATION

- 1 x 30mm Cannon with armour piercing and high explosive ammunition
- · 2 x Anti-Tank Guided Missiles for selected variant
- · 1 x 7.62mm Coaxial Machine Gun
- · 8 x 76mm Smoke Grenade Launcher

ENHANCED MOBILITY

Drive-by-wire capability allows the vehicle commander to take over the driving functions from the driver when required. With increased speed and operating range, the Hunter is capable of travelling longer distances.

VEHICLE HEALTH & UTILISATION MONITORING SYSTEM

The Hunter is capable of monitoring its own vehicle health status, allowing the prediction of the future failure points of a machine component so that it can be replaced based on a plan, hence increasing the efficiency of vehicle maintenance and management.

DIGITALISED MISSION PLANNING

Equipped with the ARmy Tactical EngageMent Information System (ARTEMIS), the Hunter is capable of digitalised mission planning from the battalion to platoon level, enhancing efficiency in information exchange between the various echelons and vehicles.

INCREASED NETWORK

With low latency and wide area communications network for faster data transfer and further reach, it enables the crew to mark and share target information live with adjacent forces.

ENHANCED SURVIVABILITY

With an all-round surveillance system, the crew has the luxury of a 360 degree field of vision whilst operating closed-hatch and protected. It is also equipped with a Laser Warning System (LWS) that provides early warning when targeted by the enemy.

NBUILT SAFETY FEATURES

Emergency stop functions like E-Brake, E-Horn, and Turret E-stop are available for the crew. The driving camera displays include safety distance markers for better spatial awareness. On top of that, voice and video recording are collected for training feedback and forensics.

The Integrated Forward Maintenance Hub @ Kranji Camp

Written By: LCP Gordon Goh Photography By: PTE Gerald Ng

Our Army is always continuously innovating to stay relevant in this ever-changing landscape. One such example is the Integrated Forward Maintenance Hub at Kranji Camp (iFMH@KC). Launched on 31 May, the iFMH@KC is a strategic collaboration between Maintenance and Engineering Support (MES) and ST Engineering Land Systems (STELS).



WHAT can it do?

- Strengthen the overall maintenance support for Combat Wheeled vehicles in Kranji Camp.
- Improve maintenance efficiency.
- · Shorten turnaround-time for vehicles.

WHAT does it include?

- Forward Technical Support Office
- Forward Spares Support Warehouse
- Forward Depot-Level Maintenance Workshop
- Intelligent Scanning and Analysis (iSCAN) system

WHAT is the end result?

- Enhanced efficiency
- At least 20% savings in manpower costs for on-site depotlevel maintenance tasks.

iSCAN system

One unique feature in the iFMH@KC includes the iSCAN system.

This system uses image recognition technology (as highlighted in the photo below) to detect and analyse abnormalities and defects.

With the iSCAN, what used to require a soldier 40 minutes, climbing up the vehicle and going under the vehicle for inspection would only require less than a minute. This also provides the added benefit of eliminating soldier fatigue. Technicians will also be able to achieve greater efficiency and productivity.







Manufacturing/Maintenance Repair Overhaul (MRO) Execution System

Besides the iSCAN, the MRO Execution System is another tool used to enhance efficiency within the workshop.

With this system, jobs are scheduled with a planning tool automatically and digitally transferred directly to the shop floor where the technicians can access their tasks through a touch screen. This efficient planning tool allows a reduction in planners' headcount by 50%, streamlining jobs allocation.

CAMP OF THE FUTURE

Written By: REC Douglas Toh
Photography By: CPL Isaac Benjamin Ong

You check your watch, the time is 6.15pm. You were supposed to book-out at 5.30pm, but due to admin matters, the book-out time has been delayed by nearly an hour. Do you find this scenario familiar?

Imagine time-consuming procedures in your NS life being simplified into little more than the scan of a thumbprint or the wave of a card. Well, it's 2019, and you don't have to dream any longer.

Introducing the Smart Camp initiative and Camp Companion Mobile Application (CCMA), your life in the Army has now been made easier. As the brainchild of both SAF and MINDEF, the Smart Camp initiative and CCMA are the products of a journey towards digitalisation, a goal that began in 2004.

The Smart Camp initiative has been implemented at two camps - Stagmont Camp and Kranji Camp III. At both camps, fresh changes have taken place, all of which are designed to make your NS experience more efficient and desirable. Read on as we highlight some of the features of the app which will enhance your NS experience!

Firstly, the new CCMA has multiple functions, all revolving around minimising the time spent completing certain tasks and duties. Say goodbye to queueing aimlessly in line to sign-in or out of camp, only for a pen to run out of ink or someone accidentally signing on the wrong line. Now, all it takes is a fingerprint scan when you are entering or booking-out of camp and a few seconds for the app to verify your identity.

COOK HOUZE





Besides booking-in or out easily, Smart Cookhouse has also tackled the waiting time at cookhouses full-on. Through the app, you will now be able to view how crowded the cookhouse is, allowing you to choose the best time to head down for your meals. Also, registering for your meal now only requires a facial recognition scanner or a contactless biometric sensor, you don't even have to use your 11B! Not only this, you can also plan your meals one week in advance by choosing from the wide range of meal selections available through CCMA.

You'll also be pleased to know that the process of drawing arms and equipment has been upgraded, eliminating the tedious and manual system that was in place before. Drawing of stores and arms are done through the Smart Store and Smart Armskote, where sensors and video analytics provide live automated updates on equipment count. What's even cooler, during maintenance works, through the Smart Workshop, you won't have to go through the trouble of cleaning grease and dirt off your hands before touching hardcopy manuals. Instead, interactive

video projections of the manuals (which you can access and control) ensure a hands-free, hassle-free approach.





Besides the already impressive features of the Smart Camp initiative, incident reporting is another feature which allows all servicemen to report any potential hazards in camp immediately.

With these new implementations at hand, hours can become minutes, and time wasted can become time gained. Ladies and gentlemen, friends and colleagues, let us take a leap into the future, and the future is now.





Armoured Infantry (AI) Officer/Specialist

An AI officer/specialist undergoes infantry training in the Officer Cadet School/Specialist Cadet School's Foundation Term, respectively, to hone their basic infantry skills before embarking on their professional term in Armour. During then, they will be trained to drive the Armoured Fighting Vehicles (AFVs) and operate its relevant systems (such as the CIS 50 Machine Gun and CIS 40 Automatic Grenade Launcher). To hone their warfighting capabilities, they undergo field exercises where they learn to command an AFV and its AI section. Eventually, an AI officer/specialist performs either the role of a vehicle commander or section commander, with the AI officer being in-charge of all the vehicles in the platoon.

Our Vocational Training: ARMOUR

Writeup Contributed By: Headquarters Armour (HQ Armour) Photography By: CPL Isaac Benjamin Ong, PTE Gerald Ng



Tank Officer/Specialist

A Tank officer/specialist will similarly go through basic training in the Officer Cadet School/Specialist Cadet School's Foundation Term, respectively, before training to drive the L2SG MBTs and operate its weapon systems (main gun and machine guns) during his professional term. As part of their training, a Tank officer/specialist will also undergo field exercises. Therafter, they will take on the role of a vehicle commander or section commander, with the Tank officer being in-charge of all the vehicles in the platoon.



As part of his training as a Gunner, a soldier undergoes the basic gunnery course where he learns to operate the main gun, its advanced sighting systems and gunnery techniques. Delivering overwhelming and accurate firepower under day and/or night conditions, trained Gunners are able to detect and destroy the enemy at extended ranges of up to 4km, forming an integral part of the vehicle crew for Main Battle Tanks (MBTs) and AFVs.



Armoured Infantry (AI) Trooper

Being an AI trooper, they are first trained in their respective weapon systems (such as the Section Automatic Weapon and General Purpose Machine Gun) before commencing integration training with the rest of the vehicle crew. After their training, they form the main dismounted fighting force of the AI unit and are capable of operating in both urban and conventional environments with the AFVs.



AFV Operator

When selected as an AFV operator, these soldiers will undergo the basic driving phase where they learn the basics of vehicle characteristics and handling. Thereafter, they embark on the advanced driving phase where they drive long distances and learn to manoeuvre the vehicles through confined spaces and obstacles (such as through gullies and trenches). After their training, they are responsible of manoeuvring either the MBTs or the AFVs through the battlefield.



After completing the Tank Gunnery Trades course, a trained loader ensures that the MBT is reloaded quickly in order for them to engage the targets in quick succession. Performing multiple roles, they are also the 2nd-in-command of the tank and operator of the vehicle communications systems. They also perform the role as an alternate driver of the MBT.







Q: What is the leadership style that you believe in?

I believe in building trust and strong relationships. That's why I spend a lot of time engaging our people, especially the ground units. When there is trust, our people will be more willing to share honest feedback. When decisions are made, especially difficult ones, our people will also trust that these decisions are made in the best collective interests.

Q: What role do you think a WOSpec plays? Warfighter, Trainer and Leader. These roles have been well articulated and understood by the WOSpecs over the years, and continue to guide us in serving Our Army and leading our soldiers well.

Q: What do you think is the most important characteristic as a WOSpec?

Heart - for our people and Our Army. We serve because we believe in what we do and how we can make a difference. We see the heart in our WOSpecs, who continue to lead and train our soldiers well.

Q: How do you groom and empower your WOSpecs? Give them the space to do what they need to do. If we want to task someone with a job, we must trust that they can do it and provide them with the space to design and execute the plans. Only then, can we allow

the person to grow and develop.

Q: Why do you think it is important for Our Army to remain innovative?

So we can constantly seek new ways to do things more effectively and efficiently! As we move towards a more motorised and mechanised Army, and our soldiers become more educated, there are many opportunities for us to improve the way we train and operate. We have seen and implemented many innovations from our soldiers, and we will continue to leverage on them to improve Our Army.

Q: How do you think the spirit of innovation can be sustained in the Army?

No innovation is too small. The process and journey of innovation are bound to be riddled with challenges. We need to embrace failures and encourage our soldiers to come up with new ideas.

Q: What are some measures you have put in place to drive and encourage ground-up initiatives?

Our Army is currently focusing on "Small I" — small innovations. As the SMA, I am also chairing the "Small I" committee, which aims to encourage ground-up innovations within the Army. I do my best to support the trials and implementation of such initiatives in order to cultivate the culture of ground-up innovation.

Q: What inspired you to sign on?

When I was in my unit, I loved the Army life and what I was doing. I also had a good role model – my then Company Sergeant Major. He told me to always do my best, and I wanted to be like him, inspiring my soldiers.

Q: What do you think you would be doing if you didn't

Wah, I have never thought of this. But I think I would have become an artist. Before I signed on, I was even enrolled into the Nanyang Academy of Fine Arts.

Q: What is the most memorable Army exercise/ operation you took part in?

It will be one of the security operations I was involved in. I was doing bomb sweeps to make sure that the venue was secure. It was a large-scale operation which made me realise the importance of collaboration. Mission success would have been impossible without working together with external agencies such as the Singapore Police Force.

Q: What do you usually do during your free time? Any favourite sport?

What free time? (laughs loudly) I do my best to spend as much time as I can with my family. It can be doing something as simple as having a meal together, or doing things that they like such as watching movies. I also love to play soccer (even though I don't have much time to play now) and I support Manchester United (F.C.)!

Secrets of Our Camp: Sungei Gedong Camp

Written and Photography By: LCP Teo Hao Yu

Sungei Gedong Camp - a camp located in the northwest of our Little Red Dot. Home to the Armour Formation, it is often cited as one of the more inaccessible camps. Despite the *ulu* nature of the camp, it is actually rich in history! We had an opportunity to visit Sungei Gedong Camp and immersed ourselves in what the camp had to offer.



Armour Heritage Centre

We made a pit stop at the Armour Heritage Centre. Previously a quardroom for the 46th Battalion, Singapore Armoured Regiment, it was repurposed to a heritage centre in 1998 as the camp expanded. When I walked in, various interesting Armour paraphernalia caught my eye. Up on display were the different versions of uniforms that the Armour soldiers wore and photographs of various happenings in the past. The heritage centre even retained some of the cells that the detainees were kept in, and it was interesting to view how the cells looked like in the past!

Beginning of Armour Formation

Walking along the walls of the heritage centre, which were decorated with many photographs, one of them got my attention. In the photograph were early pioneers of the Armour Formation, who were sent overseas for AMX-13 training back in 1969. During then, even though the training conditions were tough, they managed to complete their training and returned to share their skills of operating the tanks with rest of the formation, setting up the foundation for the creation of the Armour Formation! Indeed, without these early pioneers, Armour would not be where it is today.

"50 years ago, when Singapore saw the tanks roll down Padang in the first mobile column, there was a huge sense of achievement."

Brigadier-General (RET) Colin Theseira, a former Chief Armour Officer

Just as we were about to leave the heritage centre, we noticed a few armoured vehicles which were parked outside. They were a variety of tanks and Armoured Personnel Carriers which were used by the Armour Formation over the years. Standing amidst the vehicles, I was reminded of the humble beginnings of the Armour Formation, and how the early pioneers played their part in writing a new chapter of Our Army's history. With the formation celebrating their 50th anniversary this year and expanding their fleet with the next-generation Hunter Armoured Fighting Vehicle, the Armour family is committed to uphold their motto of being "Swift and Decisive".









Our Army's Came Davalopars

Written By: LCP Gershwin Lim Photography By: CPL Cyril Tang

Fueled by a passion for game development, a handful of our soldiers have utilised innovation to improve training methods through gamification. In this issue, we spoke to three teams of soldiers from Our Army who have used gamification principles to create dynamic and engaging games that enhance the learning process.

These Army-themed games help with strategic thinking, learner engagement, problem-solving and memory retention, and have been awarded the Army Learning Innovation Award. Named **Speed Through Skill, Ammunition Storage Simulation Game and Battlefield**, join us as we speak to the brillant minds behind these creations.



SPEED THROUGH SKILL

Created by: CPT Leong Lu Ting, CPT Lee Yong Kuang, LTA Chong Qiao Yunn, LTA Edith Ng Tse Pei, SSG Chong Yi Da, 2SG Bryan Wong, CFC (NS) Chen Yee and CPL (NS) Teo Kai Yu

Unit: 12th Command, Control, Communications, Computers and Intelligence Battalion

This mobile application was created to make training more fun and engaging for newly posted-in soldiers when they need to learn about network connectivity and fault remedy. It tackles the issue of soldiers who are having difficulty grasping the concepts through presentation slides and manuals. Consisting of different puzzles and quizzes to challenge at each level, the mobile application allows soldiers to learn at their own pace while having fun at the same time.



Our main motivation was to make training more fun and engaging so soldiers would be interested in the topic that we were teaching. We drew inspiration from Candy Crush, which has a simple game concept. You advance in the game by clearing the current level within the stipulated time. Incorporating this design principle into our "Speed Through Skill" mobile application, varying levels of challenges motivated them to clear each level before proceeding to the next.



Were there any difficulties faced during the development of the application and how did you and your team overcome it?

Designing the game application interface took up a large part of our time. Therefore, we had to balance the time spent on developing the game application while not compromising on the daily taskings that we are involved in. In addition, having to master the technical competency to code was a real challenge and it took us some time to be familiar with it.

AMMUNITION STORAGE SIMULATION GAME

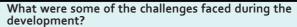
Created by: ME4 Tay Kian Teck, 3SG Alfred Koh, 3SG Benjamin Peck, CPL David Tan, CPL Ryan Ong, LCP Matthew Sung Weixiang, Mr Jimmy Tan and Ms Abital Ang Unit: Army Logistics Training Institute

Accessible by mobile or desktop, this game is a story-based game that focuses on enhancing the fundamentals of Ammunition Technicians in an engaging and realistic manner, consisting of various mini-games spanning across multiple-choice questions.



What inspired you to create the game?

Previously, feedback from our trainees was that learning the different rules and regulations was boring. Therefore we tried finding more innovative ways of bringing across the key points. Being a strong believer in the terms "Design-Thinking" and "Rapid Prototyping", we followed through the design journey of coming up with ideas, validating the ideas, gathering feedback and finally rolling out the prototype, whilst incorporating SAF-related humour to make it more engaging.



We had no one with experience in game development. This was a challenge as we had to rely a lot on self-directed learning through online resources. Also, we had to balance our work commitments with this project. Fortunately, we had strong support from our superiors and colleagues who assisted us along the way.



How do you feel being able to make a difference in soldier training with your innovation?

We feel a sense of accomplishment when we witness trainees being interested in the topics that we are teaching through this game. They no longer think that the contents are "dry", as compared to the past when trainees used to revise for the theory tests using hardcopy notes. There are also more trainees who are interested in the topics and are eager to participate in the learning process.

BATTLEFIELD

Created by: 2SG Haidah, CFC (NS) Arash and MWO Naban Unit: Army Logistics Training Institute

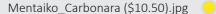
This board game is a mix of three different games "Monopoly", "Risk", and "Trivia". It aims to replace non-interactive lesson slides that are used to teach Supply foundation trainees. To make it more applicable to the learning context, it also incorporated Army elements, such as SAF Detention Baracks, Military Air Strike and Minefield.



Book Out Makan

Written by: LCP Joel Tan
Photogrαphy by: CPL Cyril Tang

Attention all! With SAF Day approaching on 1 July, it is time for us to show our appreciation. Click here and here to find out more about promotions that you can enjoy just by flashing your SAFRA card or 11B! Meanwhile, read on as we check out some of the promotions available in this issue's Bookout Makan and Hangout.





This coral-coloured pasta ain't just about bacon and eggs. Coated with creamy mentaiko sauce and bonito flakes, the pasta was cooked al dente. The fish roe also added a complex yet subtle smokiness to the dish. While you would think that the cream-based sauce would be heavy, the flavours of the dish were surprisingly well-balanced.

Address: Nuevo Cafe, 115 Eunos Ave 3, S409839 **Operating Hours:**

8AM - 10PM on weekdays 10AM - 10PM on weekends

Present your SAFRA card or 11B to enjoy 1-for-1 for all mains after 6pm daily (valid from 15 Jul - 15 Aug 19)

It just looks as good as they taste. Cracking the golden shell reveals the juicy white meat of the beer-battered fish fillet. With four dips to choose from, we would recommend the Mentaiko dip to go with the fish. The fish is accompanied with crispy french fries and Mesclun Salad with roasted sesame salad dressing.

Address: Nuevo Cafe, 115 Eunos Ave 3, S409839

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Present your SAFRA card or 11B to enjoy 1-for-1 for all mains after 6pm daily (valid from 15 Jul - 15 Aug 19)

Beer-Battered_Fish_and_Chips (\$9.90).jpg



Blended Acai Smoothie (\$4.50).jpg



Acai berry is one of the most nutritious superfruits in the world, wild harvested straight from the Amazon forest. At Renew Snacks Garage, we got to try their organic Acai berry smoothie. The texture was amazingly smooth and consistent. Located beside a gym, you can grab one for yourself after your intense workout.

Address: SAFRA Tampines

Operating Hours:

9AM - 8PM on weekdays 9AM - 5:30PM on weekends

Present your SAFRA card or 11B to enjoy \$1.50 off Acai Smoothie

(valid from 1 - 31 Jul 19)





Sweet yet light. The Russian Whiskers cheesecake (\$6.90) is definitely a dessert you will love to enjoy with your friends. Although they only offer their promotion online, don't fret as Cat and the Fiddle provides island wide door-to-door deliveries at your convenience! Click here to order now!

- Key in the promo code (CATSAF50) to enjoy 50% off 'The Russian Whiskers' cheesecake (valid from 1 7 Jul 19)
- Key in the promo code (CATXSAF) to enjoy 20% off 'Jiggly Fluff', 'Sweet and Smokey Taffy' & 'Apple of My Eye' cheesecakes (valid from 8 Jul 31 Aug 19)

Book Out Hangout

Kallang Ice World @ Leisure Park Kallang



Kallang Ice World gives skaters an unforgetable experience with its superior ice surface and quality finishing. A comprehensive range of ice-skating courses that you can enrol with your buddies is also offered. Why not come down for a cool experience by skating in sunny Singapore?

Address: 5 Stadium Walk, Level 3, S397693

Operating Hours:

10AM - 10PM: Sunday to Thursday 10AM - 12AM: Friday and Saturday

Present your 11B to enjoy 50% off the entrance fee (valid from 1 Jul - 31 Aug 19)

#mostpopular CON OUR PAGES In case you missed it, we've sussed out some of our most popular posts on our social media pages for







the past quarter of the year. Click away and catch

up on any events you've missed out!















