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You do believe me when I say that was research, don't you? Anyway, there are other people already well established as Periscope gurus and experts at milking the true power of this new platform. And a few of these people intrigued me enough to give the Periscope thingie a go for myself.

Thursday 19 November.

We both felt the whole experience went very well. And it was certainly enjoyable, even though the viewer numbers were nothing to get excited about! Perhaps if Chris and I just brushed our hair and sat around looking pretty, we might have done better :-)

But, despite the feeling of just talking among ourselves, Chris and I had a very informative and entertaining chat about his fascinating military career, the challenges and eventual rewards of finding a job and finding his feet after medically discharging from the Army, his experience with DVA, the book-publishing industry and the exciting trajectory for him and his fictional character Alex Morgan in the next few short years. If you missed that live broadcast, don't worry - the recording is now

leisure

it again.

Sincerely

Brian Hartigan Managing Editor

EDITORIAL

Periscope is an amazing new (only been available since April this year) thingie I recently came across. It's a social media platform that gives the user, to all intents and purposes, the ability to own their own TV station in their pocket!

That's right - Periscope is a live video broadcasting application for iPhone and Android phones. And it's completely free.

Unfortunately, like most social-media platforms, there is a mountain of rubbish on it. I've seen people who have no idea how to even use it, broadcasting "What does this do?" Others, simply sit in front of their phones, broadcasting themselves looking at TV or typing their latest Facebook tripe/status. One pretty girl I came across was simply brushing her hair, using the video broadcast as her mirror.

!!!!AND SHE HAD 75 PEOPLE TUNED IN TO WATCH!!!!

That's one reason how/why **CONTACT TV** has been added to the CONTACT portfolio - with our first ever live broadcast transmitted on

That broadcast was a one-on-one, face-to-face interview with Chris Allen, author of the INTREPID series of action books, soon to be imortalised on the 'big screen'.

Chris (and his lovely wife Sarah) invited me into his home and graciously volunteered to be my first guest/guinea pig.

uploaded to the **CONTACT TV archives** where you can view it at your

But do yourself a favour and download the free Periscope app on your phone now – then find and follow **CONTACT magazine** so you don't miss our future live broascasts - because I certainly intend doing

I'm very excited about this new outlet and can't wait to see where it takes me – and CONTACT TV.

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Got something to say? E-mail: editor@militarycontact.com

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A blunt knife on the field is as good as a weapon that will not shoot straight! The Warthog Multi Edge can fix this problem very quickly and to a professional standard. This unit was designed and manufactured in South Africa

and features a clever design that even a novice can use and produce a razor sharp professional quality edge! It works on all kinds of blades from large tactical knives to smaller utility and multi-tool blades. The unit comes complete with a 650 grit diamond plate, a leather strop, and also jigs to use for sharpening knives and many other edged weapons.





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PRACTICE PRACTICE PRACTICE

Personal opinion – I still think we need to look at a larger calibre. 5.56mm is too small and is "out of puff" at 300m.

Yeah interoperability would be a pain, but why be a sheep? Is 6.8 SPC too big a jump?

"If we all think the same, we're not thinking" - George Patton.

Chris H, via web-site comments

Chris, this is a very thorny subject that always comes up. There are very few soldiers who would disagree with you. But the sad FACT is that the cheque for \$100 million has already been signed [for the new EF88], so arguing or worrying about 'something else' is a bit pointless, I'm afraid. That said, there are things that can and should be discussed that can affect things that should be affected. What I'm clumsily getting around to saying is, "the art of shooting with the weapon you've been given is not taken seriously enough", in my opinion – Ed.

Sounds like we're "old School". RAAF here in Canberra get out to Majura Range while Army go to the WETTS at RMC.

RANKER

Good morning Brian,

Once again, I congratulate you on your new publication format and blog.

You are keeping up with the times and I am very impressed with the new professional layout.

Indirectly, you are making a considerable positive impact on the ADF's image, and your increasing viewership is substantiating the quality of your work.

Again, congratulations and keep up the very professional work.

COL John Weiland Colonel Commandant Australian Army Public Relations Service

It means a lot to me to receive feedback of this calibre. Thank you Sir. It may interest you to know that even since you wrote this note, I have added yet another string to the CONTACT bow – live video broadcasting, via Periscope. Details

on page 7 – Ed.

This page is a great outlet for fans to vent or to praise. Please, let us know what you think of our magazines so we can deliver more of what you want. Feel free to write to editor@militarycontact.com about CONTACT or any on other military subject – Ed

INCOMING

After shooting both, I'm convinced that the art of good shooting means you've got to get down on your guts and get dirty. Light conditions for instance, affect POI. WETTS is dark and the serials don't replicate changes in light conditions or replicate real wind (aiming off). This is Skill At Arms. Arte et Marte.

Absolutely. And let me give you a little insight into where I'm coming from... I can't remember the years (but probably around 1998-2004 or something like that), I was a member of "The Australian Army Rifle Association" and participated in a 'Monthly Medal' shoot once a month on a Sunday. And, while I always fancied myself as a decent shot, my shooting improved immensely over the years. And I learnt that there is absolutely no substitute for practice, practice, practice. Not just for aim and grouping etc, but for familiarity/competence with your primary tool of trade. And, unless you are in the Infantry etc, there is just simply not enough opportunity to put rounds down range in the ADF. The root problem is – it's just too damn hard to get on a range with live rounds. And it really doesn't need to be as hard as it is - Ed.

DATABLOCKER

G'day Brian,

Thanks for a great magazine! Just for your awareness, I added my work email address to the new subscriber list, but it looks like the DRN gateway has blocked the confirmation email – it has been all day and I have yet to receive the email (but I have received one for my personal email address). For your awareness.

Rob H, via email

Thanks Rob. Yes, DRN issues are a real concern. First it blocked me as a spam sender because of the volume of emails I send to defence. gov.au addresses (nearly 3000 at-work Defence subscribers). Now this. I did ask all old subscribers to re-subscribe to my new database so I could shut down the old database (which had developed a few quirks). Now I'm advising Defence members that I'll keep the old database open (and debugged) just for them. Anyway, thank you for alerting me to this issue. Without your email I would have been none the wiser – Ed.

Photo by Able Seaman Kayla Hayes



THE BIG PICTURE

HEADS UP

BALLARAT UPGRADE



HMAS Ballarat completed a 56-week Anti-Ship Missile Defence (ASMD) upgrade in September.

Ballarat was handed back to the Navy at the BAE Systems Henderson, WA, shipyard after 56 weeks on the hardstand following some 600,000 manhours.

Under the ASMD program, the Royal Australian Navy is upgrading all its ANZACclass frigates with a new combat management system and installing an infrared search and track system as well as a phasedarray radar and dual navigation radar systems.

While out of the water, other complex engineering and structural changes are also made - including enclosing the quarterdeck and modifications to accommodate the MH-60 Romeo helicopters.

Upgrade work on HMAS Parramatta is underway



FIRST RAAF P-8A

Construction of Australia's first P-8A Poseidon armed maritime patrol aircraft has begun.

Spirit AeroSystems in the USA started production on the 737 military derivative in October.

With major assembly now underway, the first unit is scheduled for delivery to Boeing early next year. RAAF Air Commodore Adam Brown visited the

Spirit factory to see the in-line modifications on the first Australian P-8A.

"Our new P-8 will be the first of a new generation of maritime surveillance for Australia." Air Commodore Brown said.

"We're particularly excited and proud to get what we think is the best maritime patrol aircraft in the world coming to service in our air force."

Spirit is responsible for building 70 per cent of the 737-800 aircraft, including military-specific inline modifications, before it is sent to Boeing's final assembly facility where all aircraft structural features unique to the P-8A will be incorporated.

Australia has agreed to purchase eight P-8A aircraft. The US Navy has contracted for 62, with 31 delivered to date.

P-8A is an armed maritime patrol aircraft capable of deploying torpedoes and depth charges as well as SLAM-ER and Harpoon missiles.

Army buys new bridge system

General Dynamics European Land Systems has signed a USD\$28 million contract with the Australian Department of Defence to produce and deliver its Improved Ribbon Bridge (IRB).

The contract, under the Land 155 program for enhanced gap-crossing equipment, covers delivery of bridge bays and logistics package, as well as operator and maintainer training.

IRB will replace the legacy Floating Support Bridge which was delivered by General Dynamics European Land Systems-Germany's predecessor company EWK in the 1980s.

The bridge system can be operated as a multi-bay ferry as well as a floating bridge and provides wide wet-gap crossing capability for tracked and wheeled vehicles, including the M1A1 Abrams tank.



GDELS photo

CAUGHT IN THE WILD



Photo by Dean McConaghy

Supacat - the new wild beast of Aussie Special Ops, was seen prancing around Perth streets recently, snapped by CONTACT fan Dean McConaghy.

Defence awarded a multimillion dollar contract for 89 of the specialised vehicles for Special Ops Command earlier this year.

The contract for \$141million went to Supacat Ltd to deliver 89 Special Operations Vehicles-Commando (SOV-Cdo) to the Australian Defence Force under the JP2097 Ph 1B (REDFIN) program.

SOV-Cdo is based on the latest MK2 version of Supacat's HMT Extenda and are designed to meet Australian special-force's specific requirements, including recovery and airlift provisions, weapon and C4 (command and control,

computers and communications) integration, and equipment load carriage.

The vehicles are named 'Nary', in honour of Australian Special Forces soldier WO2 David Nary, who died in a training accident in the Middle East in 2005. The vehicles can be reconfigured to suit individual missions, and the communications on board will provide digital connectivity across the ADF as well as with Coalition partners. The contract follows the successful completion of the prototype development and evaluation phase in which Supacat built and delivered the prototype SOV-Cdo. Initial operating capability is

scheduled for August 2016.

An F-35A Lightning Joint Strike Fighter completed the first three airborne gunfire bursts from its internal Gun Airborne Unit (GAU)-22/A 25mm Gatling gun during a test flight on 30 October.

This milestone was the first in a series of test flights to functionally evaluate the in-flight operation of the F-35A's internal 25mm gun throughout its employment envelope.

One burst of 30 rounds and two of 60 rounds each were fired from the aircraft's four-barrel, 25mm Gatling gun during the flight.

In integrating the weapon into the stealthy F 35A airframe, the gun must be kept hidden behind closed doors to reduce its radar cross section until the trigger is pulled.

The first phase of test execution consisted of 13 ground gunfire events over the course of three months to verify the integration of the gun into the F-35A.

Once verified, the team was cleared to begin this second phase of testing, with the goal of evaluating the gun's performance and integration with the airframe during airborne gunfire in various flight conditions and aircraft configurations.

Mike Glass, Edwards ITF flight test director, said the results of this testing would be used in future blocks of testing when accuracy and mission effectiveness capabilities would be evaluated.

The gun system will be further tested with a production F-35A next year for integration with the jet's full mission systems capabilities.

The test team will demonstrate the gun's effectiveness in air-to-air and air-to-ground employment when integrated with the fighter's sensor-fusion software, which will provide targeting information to the pilot through the helmet mounted display.





LAND 400 OFFERING

BAE Systems has offered a highly protected armoured vehicle and combat-proven turret as

combat-reconnaissance needs. As prime contractor, the company has teamed with Patria to offer the AMV35 Combat

Reconnaissance Vehicle (CRV) under Phase 2 of Project LAND 400 The solution combines Patria's Armoured Modular Vehicle (AMV) and BAE Systems Hägglunds' E35

Both are qualified and in service with NATO countries. Patria AMV was selected by seven nations with more than 1400 vehicles contracted.

a strong combat reputation, chiefly based on its operational performance with the Polish Army

munted-combat capability of Aussie Army, providing armoured fighting vehicles with improved firepower, protection, mobility and

HEADS UP

GRASS LANDING



Airbus Defence and Space has successfully completed certification testing of the A400M airlifter on a grass runway.

Using the development aircraft MSN2, the tests took place over a three-week period at the airfield of Écury-sur-Coole in France in September and examined the aircraft's behaviour on grass and natural-soil runways.

Airbus said the A400M demonstrated excellent performance in taxying manoeuvres, such as U-turns, and during take-off and landing on the 1500m strip.

These tests followed earlier successful results on a gravel surface in Spain and will be followed by tests on sand surfaces next year.

Airbus Defence and Space **S** is getting serious about an emerging security threat cheap private drones used with THRE malicious intent.

The aerospace giant has developed a counter-UAV system that detects illicit UAV intrusions over critical infrastructure and deploys electronic countermeasures to minimise the

risk. Thomas Müller from Airbus said that incidents with universally available small drones had revealed a security gap with regards to critical installations such as military barracks,

EMERGING airports, power plants and so on. "Our system offers very high effectiveness by combining sensor data from different

sources with latest data fusion, signal analysis and jamming technologies.

"It uses operational radars, infrared cameras and direction finders to identify the drone and assess its threat potential, at ranges between 5 and 10km.

"Based on an extensive threat library and real-time analysis of control signals, a jammer then interrupts the link between the drone and its pilot.

"Furthermore, the direction finder can track the position of the pilot who subsequently can be arrested."



A new art installation to commemorate the disappearance of submarine HMÅS AE1 was unveiled on 14 September at the Australian National Maritime Museum. The installation is by leading Australian light artist Warren Langley and

AE1 REMEMBERED 101 YEARS ON

commemorates the loss of Australia's first submarine with 35 souls, 101 years ago. AE1 was launched in

Barrow-in-Furness England on 22 May 1913, the first of two E-class subs built for the fledgling Royal Australian Navy. She commissioned at Portsmouth on 28 February 1914 under Lieutenant Commander TF Besant At the outbreak of WWI, AE1 joined the naval forces assigned to capture the German Pacific colonies. With AE2, she took part in operations leading to the occupation of German New Guinea, including the surrender of Rabaul on 13 September 1914. The next day, AE1 disappeared without trace on a routine patrol off the Duke of York Islands and was never found



NZ HEADS UP

NEW ROYAL APPOINTMENTS



Governor-General of New Zealand Sir Jerry Mateparae presented the Prince of Wales with a framed parchment formally granting him new honorary ranks in the New Zealand Defence Force on 4 November.

The parchment, signed by the Queen and New Zealand Defence Minister Gerry Brownlee formally appoints Prince Charles as Admiral of the Fleet in the Royal New Zealand Navy, Field Marshal in the New Zealand Army and Marshal of the Royal New Zealand Air Force.

Á defence spokesman said the appointments reinforced the relationship between the Royal Family and the New Zealand Defence Force.

NZDF personnel took part in ceremonial duties throughout the official visit by Prince Charles and The Dutchess of Cornwall.



The Black Falcons soar again

Manawatu skies will see one of the biggest air shows in New Zealand on 24 to 26 February 2017 at Royal New Zealand Air Force Base Ohakea.

One of the stars of the show will undoubtedly be The Black Falcons, newly named following a social-media competition seeking a new title for the formation aerobatic team.

With more than a dozen people suggesting the name, The Black Falcons was a clear winner.

The name was previously used as the team name for 14 Squadron in the 1990s with the Aermacchi aircraft.

Ohakea's air show will mark 80 years of service to New Zealand by the RNZAF as an independent armed service.

The three-day event will be jam-packed with displays from the RNZAF fixed-wing aircraft and helicopter fleets, the formation aerobatic team, and the Parachute Training Squadron.

Several international aircraft will also attend.

Chief of Air Force Air Vice-Marshal Mike Yardley said he was looking forward to hosting the event.

"Our formation aerobatic team will fly using the new T-6C Texan II aircraft and our large Boeing 757, P-3K2 Orion and C-130 Hercules aircraft are always popular. We're pleased to be able to host our international Air Force counterparts and we know they will bring a wow factor," Air Vice-Marshal Yardley said.

"Joining the aircraft display will be a variety of ground exhibitions so people can get up close and personal with their Air Force. "Our 2012 air show was extremely popular with more than

60,000 people attending.

"Holding an air show gives us the opportunity to showcase our skills and our people.

"The Air Force operates 24 hours a day 365 days a year

supporting New Zealand - but much of what we do goes unnoticed. "We hope the air show will provide the public with an increased understanding of why New Zealand has an Air Force, as well as giving people an entertaining day out."

By Sub Lieutenant Stephen Knowles. Officer of the Watch, HMNZS Te Kaha

In mid November, HMNZS Te Kaha arrived back in Devonport Naval Base after what was an eventful year and a busy last week at sea.

TEK took part in Exercise Southern Katipo '15 alongside HMNZS Canterbury and FNS Prairial off the Taranaki Bight, before heading for home with a detour into Wellington Harbour to uplift 20 lucky family members of the ship's company for the trip up the east coast of the North Island.

While the family members were embarked they were shown some aspects of what life on a ship is like day to day.

The family members were thrown into a Damage Control exercise fighting a fire in the gym, and saw a manoeuvring display including highspeed turns in front of White Island.

Formal rounds and a guiz night topped off the two days at sea for the family members who have now experienced life on board an Royal New Zealand Navy ship.





and Police were called upon to pool their expertise and experience in mid November to extract a vehicle that had plunged 150m down a steep bank into the Mohaka River on the North Island's east coast.

In a great example of joint interoperability police divers secured the car before the lift; Air Force supplied an NH90 to do the actual the lifting; and, Army's 5 Movements Company ensured







the car (i.e. the air load) was correctly hitched before the helicopter picked it up out of the river.

The incident was managed by the police and Headquarters Joint Forces New Zealand (HQ JFNZ) at Trentham.

NZ HEADS UP

HOME FROM IRAQ

The first rotation of 105 New Zealand soldiers to Irag returned home on 16 November from their Op Taji deployment helping train more than 2000 Iragi soldiers.

Major General Tim Gall, Commander Joint Forces New Zealand welcomed the troops at Ohakea Air Force Base.

Defence Minister Gerry Brownlee and Chief of Army Major General Pete Kelly were also on hand.

The returning soldiers formed part of a combined Australia-New Zealand non-combat training force known as Task Group Taji, the first rotation of which deployed to Iraq in late April and trained around 2100 Iraqi soldiers.

Training covered weapons handling, combat first aid, shooting and drills in complex warfighting environments.

Iraqi soldiers were also taught fundamental aspects of international humanitarian law and the Law of Armed Conflict.

The senior officer of NZDF's first rotation said the Iragis were eager to learn and were determined to fight for their country.



FIRST FEMALE HQ JFNZ WO

Long-serving Air Force Warrant Officer Toni Tate has been appointed the Warrant Officer of Headquarters Joint Forces New Zealand (HQ JFNZ).

Warrant Officer Tate, who is currently the Command Warrant Officer at Royal New Zealand Air Force Base Ohakea, will take up her new appointment on 11 December, succeeding Warrant Officer Class One Chris Wilson.

Commander JFNZ Major General Tim Gall said Warrant Officer Tate was a proven leader and an outstanding rolemodel.



"Her appointment is a significant milestone as the first female member of the NZDF to achieve this level," Major General Gall said.

The position of Warrant Officer HQ JFNZ is equivalent to the top warrant officer positions in the Army, Navy and Air Force.

Warrant Officer Tate said she was hopeful she would get the job as Warrant Officer of Headquarters Joint Forces New Zealand, but it still came as a surprise when Major General Gall phoned her in October to relay the news.

"Receiving the phone call was surreal. Afterwards, I may have done a couple of leaps of joy and excitedly told my commander," she said.

"The reaction from my family and friends has been overwhelming and humbling.

"My two sons are very proud and supportive of their mum."

She said it was an awesome opportunity to add value in the joint environment and have a direct impact in supporting New Zealand's deployed troops.

A medical ward in Taji Military Camp has been named in honour of fallen New Zealand Defence Force medic Lance Corporal Jacinda Baker who was killed in Afghanistan three years ago.

e on 19 Augus

provir

TAJI WARD NAMED FOR

FALLEN MEDIC

The Jacinda Baker Ward is part of the medical centre in Taji Military Camp where Lance Corporal Baker's friends and colleagues are currently deployed as part of the New Zealand-Australia Building Partner Capacity mission.

The New Zealand Defence Force contingent is working alongside the Australian Defence Force to train the Iraqi Security Forces, with a focus on

tactics, techniques and procedures to use in the fight against Daesh. Commander Joint Forces New Zealand Major General Tim Gall said the ward was a fitting tribute to Jacinda and the sacrifice she made in the service of her country.

Lance Corporal Baker, a 26-year-old medic from Christchurch, was killed alongside Corporal Luke Tamatea and Private Richard Harris when their vehicle struck an improvised explosive device in Bamiyan province on 19 August 2012.





THE INNER SANCTUM **AN AUSTRALIAN POLICE SNIPER**

BY JASON SEMPLE

What has changed over the past 10 or so years that allows us to consistently outshoot the manufacturers stated accuracy for their rifles? What was the turning point in our profession that has allowed us unparalleled long-range shooting abilities?

rest my cheek against the smooth fibre reinforced polymer stock. I need my cheek to weld with the stock, no gaps, no pressure, no strain anywhere. Cheek and rifle stock need to become one. A thousand times I have sought this weld and now instinct ensures I get the bond Ineed

My right eye is now naturally in line with my optics, 10 specialised German lenses collaborating to provide me untold ocular assistance out to extended ranges. The government has supplied me the best and now I need to use it to its maximum capability.

The stock extension and scope placement ensures my eye relief is correct and exactly the same every time. My left eye squints closed with little effort.

I rotate the elevation drum to compensate for the distance to the selected target. I feel the graduations via a slight clicking sensation made by internal mechanisms. Got to love German engineering! No need to come off my weld and look at the drum. I know this rifle. It is part of me.

I slowly rotate my azimuth drum to compensate for the calculated spindrift. I'll use my MSR reticle to compensate for wind. I prefer this hold-off method as the wind is too unpredictable.

The reticle looks crisp and clean after a slight turn of the diopter. I deliberately rotate my parallax drum to the infinity setting.



My support arm is bent 120 degrees with my left hand under my right shoulder griping the spigot in mv rifle stock.

My fingers adjust the spike for some minute adjustments to my point of aim (POA). The forward end of the weapon is stable and pushing firmly into the Atlas bipod attached underneath.

Without breaking position I slide the straight action rearward. The bolt carrier slides effortlessly over the top of the \$23 Swiss-P 196gn AP round that is waiting patiently at the top of the magazine. As the bolt head clears the length of the cartridge the magazine spring ensures the round is now sitting exposed and ready to be collected as I push the straight action forward. The round glides along the first part of its intended journey into the chamber of the cold-hammer-forged barrel.

The 360-degree radial collets expand into the barrel's locking groove ensuring it is firmly locked in battery. The auto-centring bolt head has now sealed the end of the barrel, prepared to ensure the pending chamber pressure of around 62,000 pounds per square inch will aid the travel of the round in only one direction.

Soon the marriage of brass and projectile will be no more.

My right hand returns to the grip and my pointer finger deftly comes in contact with the crisp edges of the single-stage trigger.

The scope picture remains good, the target is as clear as it can be at this range, through the mirage.

o'clock.

from the rear of vehicle, the spotter bei to disturb the shooter

- Find, like, share at 👫 💟 🛜 遇 🧕 🚳 🖂

I'm relaxed, my body remains welded to the around using as little muscular assistance as I can to support the gun.

My right hand has a firm grasp of the moulded pistol grip, enough to control the weapon during shot release but not overly tight to cause barrel movement during the firing sequence. A slight gap between my trigger finger and the pistol grip avoids any frame drag. I'm ready.

So close to my right side that he is almost touching me, and maybe a little more than a metre offset behind my gun is my spotter, Ray. The spotter's input is what makes sniping at long range accurate and effective, two snipers complimenting each other to produce one outcome.

Ray has established his own weld with the ground and is watching through high-end spotting optics, fitted with the same reticle as my scope. "Shooter ready. On target," I say.

"Spotter on target, wind is slight, from 10 o'clock maybe 3 or 4km/hr"

I adjust left for the breeze with my reticle maybe 0.7 mils.

I'm content at this point – because snipers don't get happy – that I kept the 5-25x56mm scope at 14 times magnification as I can readily see an increasing mirage swirling upward to about 2

"Roger, got tone" (an intimate nod to my spotter's infatuation with Top Gun). "Send it," Ray responds.

I take some decent full breaths, in and out, in and out, in and out, yet mindful not to over oxygenate the system. I suck in my last breath. A little over halfway through my exhale, I gently pause, knowing I have a little time to steady my internal system, which is now in O² credit. The clock is ticking.

The reticle is hovering where it should, the rifle feels natural and supported underneath me, my finger takes up pressure on the trigger in a controlled rearward direction. I feel the 2.8 pounds of pressure start to give as my finger continues to press rearwards. I am close to shot release. I know this rifle, we have been here before many many times.

No rush, don't anticipate. Calm and smooth is the only way to mange this hand-crafted instrument.

The firing pin is launched forward striking the primer of the cartridge. I keep pressing the trigger rearward to ensure follow through and immediately feel the weapon recoil into my shoulder.

Some of the force is dissipated by the extravagant muzzle brake, leaving the remaining force to be absorbed through my entire torso. No gaps in my weld with the rifle means no unnecessary kick, I ride with the rifle and my entire body absorbs the recoil. I don't lose my control or my position.

The projectile leaves the barrel at 2780ft/sec.

0.12 seconds later it is 100m away from my position racing through its depleting parabolic arc.

I automatically and smoothly cycle the bolt and chamber a fresh round. My only thoughts are centred on the need to return my reticle to the target as quickly as possible. This part is all instinct – conscious thought at this stage is unnecessary, and would be all too slow for the circumstances.

I'm back on target 1.5 seconds after releasing the shot. I settle just in time to see dirt and rocks kick up in a mini explosion to the right of the target.

I quickly note the exact position of the impact relative to my reticle. The round was 0.1 mils right of target and 0.1 mils low.

"Miss! Point one left, point one up! Send it," Ray mirrors my own thoughts.

I am already moving to offset my reticle and release my next shot. The quicker I release this next shot the better chance ill engage the same atmospheric conditions that affected my first round. Two seconds is the window I try to operate within. Crack, the second round is on its way.

2.53 seconds later and 1141m away, the 4inch reddish ceramic skeet disc explodes in our optic views. The 196-grain armour-piercing projectile has lost 513m/s in velocity by the time it hits with its remaining subsonic lethality. Not bad shooting for a .308 considering my first 'miss' was a mere 10cm from my POA.

Could I have made that shot when I first started sniping? The simple answer is no. At least not with the same relative ease and confidence.

So what has changed over the past 10 or so years that allows us to consistently outshoot the manufacturers' stated accuracy for their rifles? What was the turning point in our profession that has allowed us unparalleled long-range shooting abilities?

The answer is "our knowledge", a quantum leap in our knowledge of ballistics via access to ballistic software.

Yes, there are aspects of shooting that are relatively timeless. Aspects such as position and hold of the rifle, natural alignment, sight alignment and aiming, shot release and follow through. These points, all recognised by shooters as the principles of applied marksmanship, have not changed a great deal in their purest forms.

But our understanding of ballistics has definitely changed.

When writing a short article like this for CONTACT magazine, it's very hard to condense the information I'd like to share. I'll concentrate on a few of the key knowledge points to alleviate this problem and hope to connect with both the experienced, non-experienced and non-shooters who read this magazine.

For years we would go to the range and shoot with expert application of skill, all relative to the technology and our understanding at the time. Until this past decade, police snipers were expert

lason Semple shooting







Robbo shooting in Western Australia.

out to 400m, shooting movers, snaps and hostagestyle targetry.

Our shooting environment required absolute certainty and accuracy. A stray round from a miss in a busy central business district or suburban area was not an option. Once we started deploying overseas, our requirements changed and we met those challenges head on.

In the early millennium, guys were maxed out at 800m with rugged accuracy at best for .308 caliber. But, by 2008 I found it hard to get my snipers to practice shooting any closer than 750m, because they found it completely boring.

Extended ranges meant we spent a lot of time out bush on panoramic shoots that could accomodate the distances we were engaging. Most civilian and military ranges were limited in both distance and the fact that they were usually flat, operationally unrealistic open expanses.

We have evolved exponentially in the past decade and this is due to our growing understanding of internal and external ballistics.

Ballistic software now provides invaluable assistance, which allows the shooter to push through the transonic zone of his chosen caliber and remain relevant on the other side.

800m is no longer the maximum operational distance for .308 as prescribed in most weapon manuals. Now we push well past the 1000m

mar viak alm obvi calil Or 2800 In Ope wec acco Tact calil Field M the func for t mee Au equ snip Glei winc

mark with a high first-round hit probability, and viable drills for a rapid follow up shot ensuring an almost certain second-hit capability. This increase obviously translates in kind to .300, .338 and .50 calibers as well.

One Australian SF sniper recorded a hit-kill past 2800m with .50cal in recent times.

In 2005-2006, snipers from my unit, the Tactical Operations Unit, started looking at α new

weapon system and some ballistic software that accompanied it. The rifle system was the Blaser Tactical 2 Rifle in .308 and .338 inter-changeable calibers. The software at that time was Delta IV, Field Firing Solutions from Lex Talus Corporation. Myself and my mentor at the time, Jimmy, wrote the business case to gain this new kit and have it funded federally in the buildup for the CT response for the Asia Pacific Economic Cooperation (APEC) meeting in Sydney.

Another key individual in the procurement of this equipment into Australian Police Tactical Group snipers was Glen Roberts from WATRG. I mentioned Glen in a previous article. Glen was the true pioneer with regards to software and long-range shooting in our era. Glen is a true innovator and we must recognise his considerable contributions to PTG sniping.

Glen said to me recently, "There is something about hitting small targets at long range. I find it

fascinating when this is achieved with a precision rifle at distances that take several minutes to drive to. I have found it simple over the years and in the same breath, extremely complicated. I wanted my guys to not only be good at traditional ranges, but good to go at the longer ones too. I wasn't satisfied at ranges out to 600m – 800m. No, this was too close. If we could see the target I wanted to hit it. I studied everything about wind, ballistic modelling, projectile shapes and weight distributions, supersonic wave-drag theory, environmental effects and every bit of equipment required to enhance target engagements at distances beyond 1600m. When people ask why, I say why not."

We organised for Glen to attend the TOU and run our snipers through his Blaser package and also the accompanying software. From this point on, I have never looked back, my eyes opened forever to secrets that had previously eluded us. Once exposed to the software and the immediate ballistic information it supplies, guys found themselves in an exponential learning curve that continues todav.

Glen went on to perform exhaustive testing over the years on temperature variances, powder-burn rates, bullet velocity zones (super sonic, transonic and subsonic) and ballistic coefficients. Robbo readily shared the information with fellow snipers who were now addicts to pushing the limits of their shooting. We all shared our respective shooting

knowledge, with information regularly moving back and forth between units.

When the Marksman Reconnaissance Team was set up for the newly created Operational Support Group in the AFP in 2007, I once again organised for Glen to come and assist with running his most current training package for my guys. I found myself neck deep in the learning process again, especially regarding BCs. By this point in time the software had advanced to Delta V and it provided some subtle yet important improvements.

The MRT and WATRG snipers found themselves in a strong alliance when it came to advancement of our craft. Both units were totally committed to improving overall sniping capabilities. The MRT had considerably more funding than any of the state police sniper teams and we were lucky to enjoy a full-time dedicated role within the AFP, with solid commitments both domestically and on overseas deployments.

The AFP funding coupled with the truly innovative guys in that team ensured progression. Guys like Tim Russell, Ray O, Nathan C, Nick G and Jason B were instrumental in the first five years of its existence. These guys were all about their tradecraft 24/7 - and our wives can testify to this.

The result was a perfect storm of innovation and commitment. Barn and his crew keep the tradition strong today, even with external influences trying to water down the capability at times.







Author Jason Semple with spotter. "We encouraged shooting from all positions. This spot was a nasty uphill gallery we built deep in the Queensland bush."

Delta IV and the updated Delta V suddenly allowed us to understand the true measurable effects that temperature, atmospheric pressure, humidity, spin drift, bullet velocity zones, coriolis effect, muzzle velocity, powder burnt rates and ballistic coefficients had on our shooting. We also learnt how to apply this knowledge from when the rounds were supersonic, transonic and subsonic - data that is sometimes difficult to achieve.

We learnt that temperature could change our POI (point of impact) by 0.1Mil (one click for milliradian scopes) per 5 degree change in certain ambient temperature ranges (hotter temp means POI up, cold POI down). This was our field estimate system for temperature change inside supersonic ranges. If you wanted the exact change you just refer to the PDA and software.

The measurable effect relating to temp is incredibly important. If you had zeroed your rifle for a particular ammunition at 20 degrees Celsius, then went to shoot later that day when it was 35 degrees, you would find your POI higher than your nominated POA. So the 100m zero would appear high now. The zero had not changed, only the temp had changed, and thus so had the way the bullet penetrates the change in air density. The temp also changed the rate at which the powder burns in the cartridge.

Obviously the temperature effect is not as apparent at 100m. At 700m however a 15-degree temperature change translates to a POI change

of 0.3 mils (21cm) before you take anything else into account. In other words the shooting solution for 20deg would be 71 clicks and at 35 degrees it would be 68 clicks. At 1000m your POI is out by 0.9 mils (9 clicks) which translates to 90cm.

In our tradecraft we need to remove as much of the shooting-solution error as possible before the human skill factor is added to the equation. This was why so many guys chased their zero

and always found themselves 'slipping rings' (recalibrating elevation and azimuth zero settings). It pains me to think about these things today with the ballistic knowledge we now possess.

One of the most powerful aspects of the software is that once you have achieved your 100m zero, the software can then provide you an extremely accurate range card out to any range.

I can print up a range card that has the elevation and azimuth solutions for every meter out to say 1200m for my .308. I can then tabulate figures on that card relative to a number of different temperature ranges.

The software allows you to input every variable needed to give the shooter the most accurate shooting solution possible. Ambient temperature, wind speed and direction, target speed or shooter speed (helo sniping), distance, station/barometric pressure, inclination, humidity, ammunition burn rate, muzzle velocity, ballistic coefficient of the round – and even allows you to calculate what is called the 'DK value'.

The DK value is a unique application (though not widely used) in Delta V that allows for variations in the actual human shooting the weapon. If there are any inconsistencies in the accuracy of a particular sniper when all of the external inputs required are completely correct, it allows him to calculate this value by telling the software where his POI is consistently wrong. So if his POI is consistently 0.2 mils low on every solution from the software, he plugs that error into the algorithm. Once the new DK value is determined and added to his shooting profile, the software will always adjust his solutions cognisant of his DK value.

A sniper who is new to a rifle will bed in to that gun over time, making slight adjustments to his shooting position and eye relief, these all affect his fall of shot. The DK is designed to change with the shooter.

Our knowledge and access to such revolutionary software allowed us to work out the true ballistic coefficients (BC) of ammunition we were using. Ammunition manufacturers traditionally have been a little over zealous shall we say when advertising their ammunition BC on their packaging. I won't mention specific ammunition in this article, but it's safe to say that some very good ammunition brands came with manufacturer BCs of say 0.67 for projectiles with true BCs of 0.515 and 0.525.

Main solution screen on PDA for Field Firing Solutions Delta V from Lex Talus Corporation. Can run metric or imperial settings.



An incorrect BC will be completely disastrous for any shooter wanting to reach out, especially if the target range places the projectile in the subsonic region of its travel. A difference of even 0.05 in a projectiles BC will cause substantial misses once subsonic.

We now train our guys how to calculate true BCs using chronographs, which we use to measure the bullet velocities at multiple distances during the same shot. We also use a method called truina. where the shooter records consistent errors in his POI when given solutions via software using a generic BC such as 0.5. Once the consistent error is identified, this error is fed into a specialised application that calculates the true BC. Being able to work out these important variables ourselves has been something I would not have dreamed of when I was first introduced to sniping.

Knowing the effects of temperature and barometric pressure on a round and knowing your muzzle velocity and BC for a given round have to be the most important pieces of the shooting puzzle that were missing when I first started shooting. Our obsession with them over the years has allowed us to shoot some incredible distances with accuracy. It always amazes me. I can't ever get enough of the whole process.

Of course, not all tactical situations allow a sniper to use the software and related equipment, whether through time constraints, environmental constraints or imminent threat. I guarantee, however, that snipers who use it regularly in training are much more intuitive in how they shoot and are much better at understanding the environmental factors that affect any given shot.

We have been shooting out past 2400m with accuracy levels we could not have dreamed of in the early millennium. Some people over the years have questioned the need for my guys to shoot these distances when operational statistics say they are not needed. Counter-sniping definitely requires us to have these skills, and as Glen Roberts once said to me, "If you can smash a 4-inch disc 1500m away, how easy is it to smack someone inside 300".

I have always pinched myself that someone actually paid me to do my job as a sniper. Yeah there were many times we were in imminent danger and we suffered being deployed on some horrendous operations in some of the most inhospitable places on Earth. But lying next to your mate – that impending anticipation – the gratification of success – it's an amazing skill that is shared with a brotherhood I love and respect.

Always strive forward. Never be satisfied with mediocrity.

CONTACT is extremely excited to have Jason Semple on board for this continuing series of enlightening and inspiring insights into the rarely seen realm of snipers.







Our wounded have done their part for Australia, they have given their best. Thousands have wounds, some you can see and some you can't. It is now Australia's turn to look after them, please give generously and make a difference in our wounded warriors lives.



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SOLDIER ON IS ABOUT AUSTRALIANS COMING TOGETHER SHOW THEIR SUPPORT FOR OUR WOUNDED. IT'S ABOUT TELLING OUR DIGGERS THAT WE WILL ALWAYS HAVE THEIR BACKS; THAT WE WILL REMEMBER THOSE WHO HAVE COME HOME, AS WELL AS THOSE THAT HAVE DIED. IT'S ABOUT GIVING THE WOUNDED THE DIGNITY THEY DESERVE AND THE CHANCE TO DO AND BE

SOLDIER ON IS ABOUT THE ANZAG SPIRIT, AND MATESHIP AND ALL AUSTRALIANS KEEPING THEIR PROMISE TO TAKE CARE OF OUR





MELITARY EQUIPMENT

THURDER

BY LIEUTENANT COLONEL BENJAMIN MCLENNAN PHOTOS BY GENERAL DYNAMICS & US MARINE CORPS

IN NORSE MYTHOLOGY, AN APPROACHING, ROLLING THUNDER IS ATTRIBUTED TO THOR STRIKING HIS HAMMER AGAINST THE HEAVENS

The consequences were often calamitous

Well, a rolling, devastating thunder is rapidly approaching the Australian Army's dismounted combat capability. This thunder is embodied in the General Dynamics Mk 47 Striker Next Generation Lightweight Automatic Grenade Launcher System (LWAGL), approximately 200 of which will be delivered to the defensive fire-support weapons platoons of standard infantry battalions, artillery gun lines, special operations command and air force security-force elements from early 2017.

Destructive, catastrophically accurate, reliable, lightweight, modular and ergonomic are fitting descriptors for the Mk 47 LWAGL.

LWAGL's destructiveness is enabled by its ability to effectively engage point targets to 1500m and area targets to 2000m at a rate of fire exceeding 225 rounds per minute. And its potency will likely be enhanced by the emerging availability of advanced air-bursting ammunition.

LWAGL's devastating accuracy is underpinned by its evolutionary lightweight video sight (LVS), which offers a cutting-edge eye-safe laser range-finding capability with a range of 40 to 2000m and margin of error of 1m. It also provides third-generation image intensification for both day and night firing, a thermal imaging camera and a ballistic computer to facilitate detection, recognition and first-round engagement of targets.

The extensive operational employment of the Mk 47 by United States Special Operations Command (SOCOMD) and the Israeli Defence Force over the past decade is clear testament of its utility and reliability. More than 1000 Mk 47s have seen active service with US SOCOMD alone.

- 1. Colour heads-up display screen
- 2. Lightweight video sight (LVS)
- 3. Feed plate
- Barrel
- 5. Barrel sleeve
- 6. Man-portable tripod
- 7. Handgrips
- 8. Trigger

MK 47 STRIKER Lightweight Automatic Grenade Launcher By General Dynamics

New MILITARY EQUIPMENT

	Mk 19	Mk 47
Calibre	40x53 mm	40x53 mm
Туре	Short recoil operated, belt fed	
Weight	Gun: 35.2kg Total System weight: 63kg	Gun: 17.7kg Total System weight – including LVS: 40.3kg
Effective range	Point targets: 1500m Area targets: 2000m	Point targets: 1500m Area targets: 2000m Indirect capability: yes
Rate of Fire	325-375 rounds per minute	225-300 rounds per minute
Length	Overall: 1090mm Barrel: 413mm	Overall: 930mm Barrel: 520mm
Width	355mm	280mm
Height	223mm	210mm
Mountings		Turret, pedestal or tripod
Total charge pull		25kg
% Recoiling mass		55% of Mk 19

LIGHT WEIGHT AND MODULAR

LIGHT WEIGHT AND MODULARThe Mk 47 LWAGL is the most lightweight and modular light-weight automatic grenade launcher (AGL) currently available. It is significantly lighter than the Mk 19. Indeed, the weight saving equates to around 50 per cent.
This weight saving has been gained through investment in lighter and composite materials. In addition, it is far more compact than the Mk 19. The comparison in weight and dimensions is summarised in the table above.
Wersatility and modularity are key features of the Mk 47 IWAGL, with the ability to mount it on a tripod or vehicle in both manual-aiming and remote-weapon-station configurations. It can also be readily broken down into constituent parts to enable dismounted portability.



US Marine Corps photo by Corporal Kyle McNally



New ILITARY EQUIPMENT

WEIGHT AUTOMATIC GREE

Eraonon

The superior ergonomics of the Mk 47 LWAGL are rooted in the following key design features:

- Compact size and short recoil.
- Locked breech that fires from a closed bolt for improved fire/ shot/hit probability.
- Air-cooled and belt fed, using standard disintegrating belts supplied in 32- or 48-round boxes. The projectiles are fed via a hardened case.
- A robust receiver containing the working parts of the weapon.
- The barrel is contained within α short tube.
- The LVS is attached to the right side of the weapon and is operated by a series of buttons. There is also a back-up sight. The LVS display is a heads-up display on a flat screen. It is adjustable and can be detached.
- Battery power is rated for 8 hours.
- A manual trigger mechanism with unique safe and fire positions. The weapon will not fire if the barrel or buffer are not correctly installed. The firing pin does not release unless the bolt is in the closed position and the design prevents short recoils or a runaway gun.
- Empty cartridges are ejected downwards and when the top cover is opened the belt stays in place.
- Total charge pull is 55 per cent that of the Mk 19.



Mk 47 LWAGL will be issued to

- standard infantry battalions
- artillery gun lines
- special operations command
- airfield defence guards

The Australian government signed a multi-million dollar acquisition and support contract for a Light Weight Automatic Grenade Launcher capability for the Australian Defence Force in late August 2015. This contract, between Defence and Australian company Nioa Pty Ltd, has an estimated value of \$47 million.

In a statement, Defence said that as part of project and maintenance services. Land 40 Phase 2, the acquisition of this new light-"Under this contract more than 200 Mk 47 LWAGL weight automatic grenade launcher represented a systems will be delivered to the ADF from the third key step in the modernisation of the ADF's lethality quarter of 2016 until mid 2017." and capability.

Unlike the mythology surrounding Thor's hammer, the approaching, rolling thunder of the Australian Army's Mk 47 LWAGL is very real

KIMM X 46

LUM STAR

CTG 4) MM

FNF 010

40MM X 46

LILIM STA

This approaching thunder will usher an exponential increase to the combat power of relevant Australian Army and other units and the combined-arms teams to which they contribute

minunition options

As reported by CONTACT in September 2013, Australian Munitions and Singapore Technologies Kinetics Ltd (ST Kinetics) signed an agreement to cooperate in Australia and New Zealand to develop, manufacture and market ST Kinetics' worldleading 40mm low velocity, extended-range and air-bursting ammunition.

The two companies will focus on making new 40mm capabilities available to the ADF and establishing supply chains from within Australia.

ST Kinetics already designs and manufactures a range of 40mm weapons and ammunition.

Its 40mm ammunition range includes air-bursting, self-destruct and even camera-surveillance rounds.

The company's 40mm ammunition is currently in service with a number of ABCA (American, British, Canadian, Australian) countries.

Australian Munitions Executive General Manager Kevin Wall said the introduction of this capability to Australia would give Defence new options in 40mm ammunition.

"This range also complements the broad and deep product portfolio offered by the Thales Group and our strategic partners," Mr Wall said.

Australian Munitions is part of Thales group and is the largest manufacturer and supplier of explosive ordnance in Australia.

If taken on by the ADF, the new range of 40mm ammunition would be manufactured at the company's Benalla, Victoria, facility.

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"Nioa Pty Ltd is based in Brisbane and will oversee the delivery and support of the LWAGL to the ADF," a Defence spokesman said.

"Nioa currently employs approximately 50 staff, and three new jobs will be created [because of this contract], as well as opportunities for other Australian companies to provide ongoing support



ANTARCTICA



RAAF and Australian Antarctic Division commenced joint missions to Antarctica, with C-17A Globemasters landing at Wilkins Aerodrome in November.

A C-17A flew the 3450km in just over five hours, landing at Wilkins Aerodrome near Casey Station on 5 November and again on 21 November, with small loads of cargo.

The missions are the start of a proof-of-concept series, with the remaining flights scheduled between now and February next year.

CONTACT asked No. 36 Squadron XO Squadron Leader Steve Ferguson, who flew the first mission on 5 November, about the historic milestone. CONTACT: What was the overall experience like? Squadron Leader Ferguson: The experience of operating in Antarctica for pilots is a career highlight. Only a fraction of the world's population visit Antarctica in their lifetime, and a smaller fraction still can say they have flown a C-17 on and off the ice there. **CONTACT**: What special considerations come into play when landing a heavy aircraft on ice?

Squadron Leader Ferguson: The ice runway at Wilkins is sited on a glacier that is 700m thick. The surface is textured to provide grip for the aircraft wheels and is similar to a wet, sealed runway. While the ice runway esents some challenges, the broader challenges lie in nature of Antarctic weather, and the fact that

ry from civilisation if anything goes

wrong. There are a number of additional risks which need to be managed when operating into and out of Antarctica which individually do not necessarily make the operation dangerous, but in combination have the potential to do so.

CONTACT: Is it a 'hairy' experience in any way? Squadron Leader Ferguson: No, the actual act of flying the approach and landing to Wilkins is quite standard and in good weather is fairly benign. However, approaching Wilkins and landing on the ice would be more challenging in some of the adverse weather conditions which are common to the area, and which can change very quickly. Our crews have very robust decision-making systems, both before and in flight, to ensure the aircraft and crew are not exposed to a dangerous approach, landing or subsequent takeoff conditions. The takeoff is normal, however the procedures leading up to it, including start and taxi in very cold ambient conditions are different, and these have some very specific flight-manual procedures which crews follow when on the ice. CONTACT: What was the personal experience like? Squadron Leader Ferguson: It was pretty enlightening. Nowhere else on Earth is the environment so pristine and, even from only a short time on the ground at Wilkins, one gets a very clear impression of how essential it is to study, protect and preserve it in its

current state.

WHO USES CARINTHIA...

AUSTRIAN ARMY **BELGIAN ARMY BRITISH ARMY CHILEAN ARMY** CYPRES ARMY ESTONIAN ARMY **FINNISH ARMY GERMAN ARMY** HUNGARIAN ARMY INDIAN ARMY NETHERLANDS ARMY NORWEGIAN ARMY PORTUGUESE ARMY **SLOVAKIAN ARMY SLOVENIAN ARMY** SWEDISH ARMY SWISS ARMY **TURKISH ARMY** U.A.E ARMY



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PEOPLE WHO KNOW.



Adopt a Digger to help veterans with PTSD

Despite a very long walk and a very big challenge ahead. Rovce Hardman won't be alone this Christmas. But in houses, farms and campsites across Australia there are veterans alone and isolated – even in the company of their own families.

In the middle of nowhere surrounded by black stumps and desert, Royce Hardman has been confronting his demons on a march around Australia to raise awareness for PTSD, and will be far from home this Christmas.

Royce Hardman was on the verge of suicide after returning from active duty in Afghanistan, but survived his ordeal with PTSD and decided to do something constructive to raise awareness of the illness for the benefit of his mates – and raise funds for Soldier On in the process.

Military Shop comes into contact with veterans and service people every day, but were so inspired by Royce and his dog Trigger they also decided to do something to help Diggers suffering from PTSD and related mental illnesses

So, Military Shop is putting up its popular Great War Bears for an "Adopt A Digger" programme this Christmas season to help raise funds for Soldier On and to promote awareness of PTSD in the community - and maybe put a smile on the faces of a few Defence kids and collectors along the way.

Christmas can often be the hardest time of the year for veterans, especially those suffering from post-traumatic stress disorder. Large family gatherings can be stressful for many Australians, but veterans suffering from mental illnesses such as PTSD face unique strains around this time of year. Many PTSD sufferers report a sense of loneliness, even when surrounded by loved ones.

Beyond Blue says PTSD is a particular set of reactions that can develop in people who have been through a traumatic event, have experienced or witnessed an event which threatened their life or safety, or the safety of others, and led to feelings of intense fear, helplessness or horror.

Although between 50 and 80 per cent of the population will experience a trauma in their lifetime, not all will develop the disorder. It's estimated that 8 per cent of the population will experience PTSD, but many will recover after a few months.

PTSD is particularly relevant for the military as service people may be exposed to high stress and trauma over prolonged periods. Royce Hardman spent four months in Afghanistan under constant threat, but it wasn't until he arrived home that the enormity of his war experience began to take a toll.



Most Diggers suffering from PTSD aren't vocal, violent or homeless, as per the typical misconception. The average Australian service person struggling with this invisible killer seeks to hide the disorder, especially from family and friends. Indeed, what makes PTSD so deadly is not that those diagnosed are prone to violence towards others, but the spectre of self harm especially among those who don't seek treatment. Too many sufferers hide their growing sense of helplessness until it is too late.

When soldiers return from α conflict zone they return to normal family life, most often a safe and loving home where little or nothing has changed. Many don't want to disappoint their families who've been worried and waiting eagerly for their return. So, when the entire family gathers for an otherwise happy event such as Christmas, a veteran suffering from PTSD may not want to ruin the occasion and seek to hide their often-painful feelings from their family and friendship groups. But, seeking to hide an already invisible illness is perhaps the worst thing the sufferer could do.

Royce Hardman is a rare example of a PTSD sufferer who has seized the initiative and talks openly about his illness and will no doubt find comfort in the company of his dog Trigger this Christmas.

So, when you're celebrating this December, spare a thought for Royce and Trigger. And think also of the many others who are suffering in silence in homes and suburbs across Australia.

Veterans and mental health organisations are ready and willing to help if you know someone who might be suffering from PTSD this Christmas. If you or someone you know needs support, contact Lifeline on 13 11 14, Beyond Blue on 1300 22 4636 or the Suicide Call Back Service on 1300 659 467.

You can also help our physically and mentally wounded service men and women if you Adopt A Digger – with \$20 from every 'adoption' donated to Soldier On.



A treasured gift of meaning

No other Christmas gift can hold as much meaning or give such joy, as a Great War Centenary Bear. In this, the second Christmas in the four-year Anzac Centenary, give a gift of pride in our nation that remembers the courage of our diggers long gone. Stunningly detailed uniforms and badges ensure your bear will be treasured for years to come.

And in the true spirit of Christmas we'll give Soldier On a \$20.00 gift from you so they can look after today's men and women wounded fighting for our country in recent wars.



AMPHEROUS TASK FORDS

Australia's newest military capability – the Amphibious Ready Element – demonstrated its abilities in waters off the north-Queensland coast from August through to October. Townsvillebased 2nd Battalion, Royal Australian Regiment (2RAR), with MRH-90 helicopters from the 16th Aviation Brigade, combined with the Royal Australian Navy's HMAS Canberra and attending ships, as well as Air Force assets to conduct a series of amphibious training activities. The 'Sea Series' of exercises enabled the amphibious force to achieve 'interim operational capability'.

Commander of the Amphibious Task Force Captain Jay Bannister and commander of the landing force Colonel Michael Bassingthwaighte spoke to CONTACT via phone from the ship during the exercises...

HMAS Canberra at anchor near Innisfail, Queensland, during Sea Series 2015. Photo by Leading Seaman Helen Frank

LO2 HMASCANBERRA







L02

CONTACT: Can you give us a lay-man's overview of what the Amphibious Task Force is?

Colonel Bassingthwaighte: The embarked forces on HMAS Canberra are made up of five key elements. There is the command element, which is an integrated joint staff from the Army, Navy and Air Force that supports two commanders being Captain Bannister as the commander Amphibious Task Force and myself as the commander landing force.

The landing force itself has four major components - the pre-landing force, which consists of small boat platoon, recon/surveillance/snipers, maritime tactical operations element and light EWP.

Then the ground combat elements, which is a scalable element. At the lowest level it is a combined-arms team based around an infantry company from 2RAR, includes a cavalry patrol from the 2nd Cavalry Regiment, a JFT from 108 Battery, which is now part of the second battalion, and the normal supportcompany elements in there as well.

Then we have the rotary-wing element. Currently embarked, we have the baseline capability of four MRH-90 Taipan helicopters from A Squadron, 5th Aviation Regiment, from Townsville.

The final component is the combat support element, which holds the bulk of our logistics, including all the normal components, such as technical support with mechanics, armourers and so on, transport platoon, supply element, catering, and we have military police in there doing the normal raft of militarypolice support tasks and we have a close health platoon from the 2nd Close Health Company of the 1st Close Health Battalion that provide us our role 1 health capability ashore. That's also supported by a maritime operational health unit that belongs to Captain Bannister, which provides the role 2 capability in the primary care facility on the ship.

So hopefully that gives you a potted rundown of the prime forces on HMAS Canberra. Of course, that is part of the broader Amphibious Task Force which normally consists of a major amphib unit such as HMAS Canberra, escort vessels such as an ANZAC-class frigate and a support ship, in this case supplied by New Zealand's HMNZ Endeavour. Any questions?



MEA



CONTACT: Yes actually. One thing that stuck out for me there was the inclusion of artillery in infantry. Is that new?

Colonel Bassingthwaighte: The second battalion has now been focused on the amphibious role since 2013. At the start of 2014, the battalion was reorganised from a standard infantry battalion to an amphibious capability development organisation, which was designed around the ability to be able to generate the core elements of an amphibious ready element and that saw the inclusion in the battalion of an observer battery, which is 108 Battery of the 2nd Battalion, and a combat engineer troop – 21 Combat Engineers Troop, which is now part of the second support company in the battalion.

We also had more combat service support elements attached to us so that transport platoon was enhanced with Bushmaster PMVs and our tech support platoon was enhanced with more marine techs and we transitioned pioneer platoon into Able Seaman Ian McGiffen guides Zodiac off a landing craft. Photo by Leading Seaman Helen Frank



a small boat platoon and we've increased their capability and training over the past couple of years.

CONTACT: Is this re-org of 2RAR a proof of the concept for the shape of other battalions or will 2RAR become the sole amphibious element?

Colonel Bassingthwaighte: That is the golden question we're striving to answer as we head towards full operating capability in 2017.

The results of this exercise will inform that.

The second battalion will endure within the Army, but exactly what the second battalion looks like beyond 2017 is something we are currently working on as we learn from the development of this amphibious capability.

CONTACT: Will the concept have to expand when HMAS Adelaide comes on line?

Colonel Bassingthwaighte: We have the capability within the battalion to provide the core elements of a landing force to support both ships. So next year, the battalion essentially has the ability to split in two and half of the battalion will support HMAS Canberra and the other half of the battalion will support NUSHIP Adelaide, which will be HMAS Adelaide by then, in her workups next year. Then we will have the ability to come together and provide a reinforced amphibious ready element within a single ship, taking advantage of the full capacity and capability of each ship.

CONTACT: Does this mean 2RAR is substantially bigger than a standard infantry battalion?

Colonel Bassingthwaighte: No actually, we're slightly smaller. A standard infantry battalion sits up around 640, and my current unit establishment is in the order of about 587.

CONTACT: With all this honing and shaping, does this give you enormous influence in the future look and feel of the Army?

Colonel Bassingthwaighte:

[laughs loudly] Probably slightly more than a standard infantry battalion commanding officer but only because of the experience I've gained over the past few years.

Whether that has a big impact on what the Army looks like, well I'll let history bare that evidence.

I've been charged with providing advice on the development of a capability and how it fits within the evolving Plan Beersheba, which continues to evolve in accordance with the Adaptive Army approach.

I am fully engaged with that, as is Captain Bannister and all elements of the amphibious force in ensuring that we provide the best advice we can to inform senior leadership on the evolution of the capability.

CONTACT: The military is a big beast with a reputation for unwieldiness. Do you feel constrained or are the gloves off and you can shape things as required?



Colonel Bassingthwaighte:

There is of course the normal friction you would find in any large organisation, but I must say that we have achieved everything that we have set out to achieve to this point in the continuum in the development of the capability.

There is significant focus within the ADF on the advantages of this capability over the next few vears.

I've been involved in this since the middle of 2011 in α concentrated way and there is good, solid, robust discussion on



how the capability is to evolve, but what we are seeing on the ground today is a capability that will be a game changer for the ADF and will ultimately change the look of our ADF and take the ADF to levels of joint integration that we've never seen in the past.

CONTACT: So how is working with Navy and Air Force so closely working out?

Colonel Bassingthwaighte: Exceptionally well. We've been able to take an approach with the amphibious force that



very few nations have been able to achieve.

As far as I'm aware, there is only one nation that is achieving the level of integration at a headquarters level in their amphibious forces as we are, and that is the Dutch Royal Marines and the Dutch Navy.

So, in the amphibious task force we have one staff that works in an integrated way to develop the plan from the very beginning – and that one staff supports both commanders, being myself and Captain Bannister.

So the tactical integration of Army, Navy and Air Force is working exceptionally well.

Captain Bannister: Amphibious operations by their very nature force joint integration. So it's not really surprising that the integration of staff is really pushing that to another level. And we've found that that is

working very well for us.

CONTACT: Are you in contact with the Dutch or others to



learn from them – or are you in a position to be able to teach lessons at this stage?

Captain Bannister: Michael, as he's alluded to, has been looking at amphibious warfare for quite some time and he and I have been in this game, in our current positions for a couple of years.

We have a number of ex-Royal Marines who have joined our services - our Army and our

Navy – so we are leveraging off their experience.

We have a US Marine Corps colonel who's on permanent staff at the Deployable Joint Force Headquarters.

The US, the British and the Dutch have all been very kind in offering us opportunities and staff to observe and in some cases embed in their staff to raise our knowledge and experience.

And that was critical to us getting to where we are today.

CONTACT: Is it unusual that people like you are left in the same position for such a long time?

Captain Bannister: No, I'll actually only do about two and a bit years in this position.

Colonel Bassingthwaighte: I'll do about three years.

I was posted in specifically to cover the initial period of this development. The normal command tenure in the Army is two years but there are some officers in situations such as

this who are left in position in order to achieve capability development milestones, and I'm one of those.

CONTACT: Loking back over the past two or three years, what do you know today that you didn't realise you needed to know back then?

Colonel Bassingthwaighte:

Hah – many – many – many things. The thing that struck me the most from my point of view was the level of detail that you need to be across to be able to successfully and safely execute amphibious operations.

History has shown – and it has been well written on by a lot of great theorists - that amphibious operations are the most complex military operations that you can undertake. And my experience over the past few years has certainly bourne testament to that fact.

So, I now know a lot more about how the Navy operates, air capabilities, aviation airworthiness, sea worthiness and the safety procedures and capabilities across all the three services than I ever thought I would know before undertaking this endeavour.

CONTACT: If an old soldier or an old sailor from 1995 or even 2005 got teleported to today, would he recognise the Army or the Navy of today?

Colonel Bassingthwaighte: I think they would be quite



surprised at how far we have come in that period. If you look at the Army for example, the equipment that the standard infantryman now carries compared to what it was even back in 2005 – or, if you look at what we carried in Timor. I think not long ago our standard equipment issue cost a couple of hundred dollars. And now there's a diagram going around showing that it takes tens of thousands of dollars to equip the modern infantryman.



I think that those who participated in the Sea Lion exercises back then would be completely blown away by what HMAS Canberra and HMAS Adelaide are able to provide.

CONTACT: What is the atmosphere in 2RAR these days - excitement, anticipation, trepidation?

Colonel Bassingthwaighte: I really think everyone involved is very keen to explore the amphibious capability.



We have been able to participate in some really great training, particularly this year.

If you take this year as a snapshot – in the first three months of the year we did our workups and concluded with a certification to training level 5, which was a danger-close, livefire, combat-team, combinedarms exercise, which some soldiers had never seen before in their careers, where we saw a combined-arms team conduct a live-fire advance, attack, defence and withdraw under danger-close conditions.

We then supported HMAS Canberra's workups. Concluded that and had a little bit of time off. Then we were on exercise Talisman Sabre where we formed the 2nd Battalion Landing Team for the 31st Marine Expeditionary Unit and conducted landings with the US Marines in Fog Bay in the Northern Territory – before transitioning as the 3rd Base Manoeuvre Group for the 4th Marine Expeditionary Brigade

down in Bradshaw field training area for the conduct of live-fire exercises with the full suite of capabilities available to us.

Then we came back, couple of weeks off and now we've been two months on HMAS Canberra conducting a broad suite of activities, going from humanitarian assistance and disaster relief to conducting evacuation operations – and we're now currently conducting security and stability operations concurrently with our HADR operations in the fictional country of Tropicana.

So, you don't get a much broader or more interesting range of roles and tasks than that within an infantry battalion.

It's a high tempo but it's an interesting tempo, and morale in the battalion is pretty good.

CONTACT: Would you say that a young digger going through Kapooka or Singleton right now would be well advised to tick 2RAR as their first posting preference?

Colonel Bassingthwaighte: All the indications I'm getting right now are that 2RAR is one of the most popular battalions for people to come to, not only from Singleton, but from the Royal Military College as well.

That, combined with the fact that Townsville is now one of the most popular posting localities in Army means that I am very lucky as a commanding officer to be flush with talent wanting to come to the battalion - which is particularly useful given the complex environment we work in.

CONTACT: Captain Bannister, what's the atmosphere like from the Navy's point of view?

Captain Bannister: The progress across the maritime space has been very good and Navy is very excited about this capability, as we are about some of the other new capabilities we have coming through in the next few years.

We've been planning for this for a number of years but from

a hands-on perspective we have only got our hands on HMAS Canberra for less than 12 months now and already we are out here doing this, complex, joint, collective training activity with Army and Air Force.

The Navy is keen to learn and is continuing on a positive growth path in understanding the capabilities of the platform and how to use it.

And, importantly, because the maritime environment can be quite unforgiving, to do all that safely and getting these soldiers ashore safely, both by helicopter and by landing craft, is no mean feat – and that's certainly one of the key focuses of what we're doing at the moment.

Over the next couple of years as we get down to integrating the ARH Tiger helicopter as well as the Chinook and start doing more complex mission sets, we'll continue to challenge the Joint Task Force through to 2017 when we aim to take all three ships of the Amphibious Ready Group -Canberra, Adelaide and Choules, together with all their embarked forces – through another certification activity.

The sailors onboard the ship have done a great job in hosting such a large number of embarked forces. With a crew of 400 and an embarked force of about 700, it's really tested the ship in terms of their ability to support everything from cooking meals for all those people to getting around the ship safelv.

I'm very happy with where we've got to and very pleased to see this amphibious culture develop and grow between the forces.

CONTACT: How much work do you guys have in front of you to get the big tick in the box for Final Operational capability?

Captain Bannister: There's quite a bit to go Brian. We're very busy over the next couple of years, throughout 2016 and into 2017.

We have to do similar to what we've done with Canberra on Adelaide to bring her up to speed next year.



We have to go through first-ofclass flight trials with the ARH Tiger and Chinook.

Canberra will deploy next At the same time, we'll be So it's going to be pretty busy That's not just about those ships

year to RIMPAC with the ARE - that is, major elements from 2RAR and 5th Aviation Regiment - which will test our ability to sustain that capability over a number of months deployed away from Australia. That is a key part to ensuring that we understand the capability and we can project it offshore. learning to work with some of our partners in the region, in the Pacific, during RIMPAC, particularly the US, as we desire to achieve a level of interoperability with them. over the next couple of years and particularly pulling together a significant force with all three ships together in 2017 will be a significant challenge.

of course. Whenever we project this sort of capability, we need air and sea combat power, in testing conditions, so that we can do these operations.

We also rely heavily on the maritime combatant ships and the maritime logistics ships and the Air Force to provide their surveillance and aircombat power in a contested environment as well.

CONTACT: Any final thoughts?

Colonel Bassingthwaighte: The amphibious capability is a game changer that I think will really change the face of the ADF. It gives us a level of capacity that we've never had before and it will significantly enhance our ability to respond to evolving crises both natural and man made within our region, as well as being a major player in enhancing our alliances and building capacity in the region.

It's a great capability. We're all really excited about it, and it's progressing very well so far.

Let me tell you, when you see something like four NRH-90s launch off the deck, and the landing craft are operating at the same time out the back and the fact that Australia now has this capability – it really is world class.





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Members of the 7th Battalion, Royal Australian Regiment, conducted Exercise Boars Run at Cultana Training Area from 10 through 18 September 2015.

The exercise was a two-phase activity: Phase 1 a company live-fire activity and Phase 2 a battalion advance-to-contact with company clearances of urban objectives.

I popped in for a quick visit in the early stages of Phase 1 and I was impressed by what I saw.

My visit wasn't meant to be so brief, however.

You can read more about my four-day road trip for a one-day visit in my blog, aptly titled 'The worst first blog ever' here.

Suffice to say, my visit wasn't planned as a quick in/ out and my hosts' plan for the longer-version embed looked pretty exciting when it was spelt out to me on arrival – a company clearance of an enemy position dug in to a full-on WWI-style trench system, and two further follow-on clearances of smaller enemy outposts - all using live ammunition, with live mortar and M113AS4 support.

This promised to be big.

But for me, even as the action on the battlefield heated up, the rumbles in the tummy spoke of something dodgy eaten on the journey.

Before I get to that, though, let me tell you I did meet some very interesting characters and took some notes, which I'd like to pass on.

WO2 Keefe was my first contact with the battalion. He met me at Range Control before handing me off to the adjutant for briefing.

I liked WO2 Keefe. A talkative chap with lots he wanted to tell me.

"7RAR is an awesome place for a can-do soldier to work," he enthused.

"The boss' attitude is, "make it happen, and if you can't make it happen, I want to know who got in your way".

"There's a real sense that everything is done for a reason around this battalion - everything makes sense."

According to WO2 Keefe, every exercise 7RAR undertakes is conducted as though it were the real thing - event RSO&I [reception, staging, onward movement and integration].

On Boar's Run, that was done at Alamein Camp formerly and more famously know as Baxter Detention Centre.

One interesting thing he told me about this process was that every soldier was weighed clean-skin and again while carrying all his kit.

And the modern soldier's kit weighs, on average, 50kg.

However, one soldier weighed in with 57kg of kit and, after all his gear was stripped down to figure out what was excess, a new battalion policy was formulated – the gunner doesn't have to carry the night sight for the gun.

Out in the field too I noticed things being done 'properly'.

Gun pickets were placed and manned properly. Noise discipline was observed and policed at all times - which wasn't fun for this hard-of-hearing reporter in the dead of night.

And all this even in a rear-echelon harbour when the boss wasn't around.

An anecdote relayed to me might explain why. A keen rear-echelon commander – a junior officer – was having difficulty communicating with the front lines, so he decided to move and set up his radios on higher ground. Unfortunately, this put him ahead of the main body and, when the boss twigged, the junior officer was informed that he had 'driven over a landmine and all his party were dead'.

All this realism is well justified, of course, as 7RAR rolls towards 2016 and the 'ready' phase of the Army's raise, train, sustain cycle.

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My very brief experience out bush with 7RAR didn't go brilliantly from an 'embedded media' point of view, but I learnt a lot in this regard.

Of course, I learnt I'm too old and too unfit for grunting - that really is a young man's game (unless you're used to it). Note to self - fix this!

I also learnt I've been out of 'the system' a bit too long to just slip back in. And, I've been spoilt by Iraq and Afghanistan 'embed' experiences where my hand was held on every step of the trip. Yes, that could be frustrating when I wanted to talk to soldiers without an officer hovering about or I wanted to go somewhere other than on the guided tour. But I also never had to worry about where or when my next meal was coming from, and had disposable water bottles thrust into my hand ever five minutes.

On the home front, however, having no dedicated media escort and a host unit knowing in advance that 'he's ex Army' actually turned out to be a serious disadvantage.

Being my first embed in a very long time in a domestic bush setting, I actually needed my hand held, especially in terms of logistic support.

In preparation for this trip I had all my cameras and GoPros and batteries and technical reporter-type bits squared away. I even had sufficient socks and jocks and my comfy swag sorted. But what I didn't even consider was my basic soldiering kit – probably because I haven't been bush as a soldier for 15 years!

So, when I was handed two ration packs with an assumption that my catering needs were covered by that for the next 48 hours, my adapt-and-overcome gene got a sudden wake-up call. But, you try living out of a ration pack with no KFS, no cups canteen, no hexi stove and just one 700ml water bottle, and no basic webbing to carry them in, and see how well you survive! One surprising godsend though, was to find that FRED was still included in the rat pack. At least I could open the tins.

Anyway, armed with all my Gucci camera gear and my one little water bottle, I was attached to a pretty friendly sergeant and told to follow him.

We stopped for a chat with a not-so friendly sergeant who said, "You're not exactly dressed for crawling in the dirt".

"Sorry dude, I'm here to do a job and it doesn't involve crawling in no dirt," I retorted as the infantrysergeant's brain flipped between whatthefuckyousay and mustnotkillcivvies before turning away with a "Humph".

So I followed my friendlier sergeant for several kilometres through Cultana's very distinctive saltbush country, heading for the big company-sized assault on the WWI-style trench system.

This assault was going to be something to behold - or so everyone was very keen to tell me. Everyone from the private soldier to the CO asked if I'd seen the trenches yet, and when I said no, the enthusiasm in their eyes told me I was in for a treat.

So, after several hours walking in the blazing sun, shooing billions of blowflies from my sweaty face, and snapping the odd photo of soldiers on the march (saving my batteries for the big assault), the shooting finally started.

But, hang on! What are they shooting at? Where are the trenches? Aw shit - turns out I'm attached to the platoon laying down suppressing fire from the next ridge over - and those trenches and that spectacle is waaaay over yonder, and I can see diddly.



After the battle, when we all gathered round for a debrief – and I finally got to see the rather impressive trench system - the very old-school regimental sergeant major who gave the soldiers a rev-up for what he perceived was a lacklustre first assault on the trenches, uttered some stern words to the soldiers that made my decision to cut out early quite a bit harder. His kicker argument went something like, "If any of you bastards think this is hard work and you're thinking your sore knee or your sore head [yep, that's me] might just be the excuse you need to pull the pin well forget it.

"You people need to seriously harden up and become real chummy with your new best friends, Mr Paracetamol and Mr Ibubrufen."





But, despite the sergeant major's words, I really did have to pull the pin. Another day of sun and tummy rumbles could well have made this a very different report altogether.

By the evening of that first full day in the bush, I was quite unwell (and remained so for several days after), and thought it best for everyone concerned that I bow out gracefully, lest the hard-working diggers of 7RAR end up with a VERY-EX-Army noduff casualty to deal with. Imagine the paperwork!

So, that's how/why I spent four days driving 3200km for just one day in the bush with 7RAR. And that's why this story isn't quite as good as I had hoped/planned it would be.

That said, my trip wasn't a complete waste. I did get some nice photos, the best of which I'm happy to display here – with apologies to the people concerned for not collecting names for the captions. And my apologies to 7RAR for failing to tell a

much better story of their hard work and progress towards 'READY'.







RAAF Base Pearce

"...will remain the primary base in the west"

Wing Commander Peter Kershaw

Words Serge DeSilva-Ranasinghe and Mitchell Sutton

Though widely seen in Defence terms as a 'Navy state,' it is seldom realised that Western Australia is home to important Royal Australian Air Force facilities. Around 35km north of Perth lies RAAF Base Pearce – named in honour of WA politician Sir George Pearce – which is the Air Force's primary fixed-wing training centre, and permanent base on Australia's western seaboard.

First constructed in 1935 to provide the fledgling air force with an establishment in Western Australia, RAAF Base Pearce has become an enduring feature of the Royal Australia Air Force's posture.

HISTORY AND DEVELOPMENT

As Wing Commander Peter Kershaw, the commanding officer of the Pearce-based 25 Squadron, illustrated, the base fills a specific purpose in the RAAF's national operations.

"Pearce is primarily set up as a training base, but also has the ability to support major exercises and operations," Wing Commander Peter Kershaw said.

The rationale for building an airbase on the Indian Ocean side of the continent was vindicated less than a decade after the base opened, with Pearce playing a key role in the defence of Australia during World War II.

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Lying at the nexus of a series of new bases rapidly formed in the State's south-west at Cunderdin, Guildford and Maylands, Pearce was to play an operational and training role for the duration of the war.

The base hosted the anti-submarine and reconnaissance patrol aircraft of No.14 Squadron, the air-defence, trainer and bomber forces of No.25 Squadron and the transports of No.35 Squadron.

It proved highly useful, with bombers staged from the base conducting missions as far afield as the Indonesian archipelago.

Pearce survived the wave of base shutdowns and consolidation that occurred after the war, and took on

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its current role as the RAAF's premier advanced fixedwing flying training school in 1958.

In view of its geographic location, the base has also taken on a number of other uses in recent years. RAAF aircraft heading to the Middle East Area of

Operations, such as C-17 Globemaster transports and F/A-18 Hornet fighter-bombers, frequently use Pearce (and the more northerly Learmonth) as their last Australian stop-over point.

It has also proven to be a useful staging area for AP-3C Orion aircraft operating on patrols in the Indian Ocean, and receives visiting UK and US military aircraft on a regular basis.



In addition, the Republic of Singapore Air Force (RSAF) is also present at the base and, since 1993, has conducted all of its initial pilot training at Pearce through its No.130 Squadron and Standards Squadron.

Despite the standardised level of support it provides, there are a number of qualities that make RAAF Base Pearce unique.

"We have three runways here, which is probably one of the things that makes it relatively uncommon," Wing Commander Kershaw said.

"The other thing that's unique to Pearce is the rate of effort with flying.

"The base is well set up to support that and, with around 110,000 movements a year at Pearce and Gingin combined, it's by far the busiest military airspace in Australia."

Explaining how Pearce ranks among the RAAF's 11 permanent bases, Wing Commander Kershaw says, "If you want to use number of aircraft movements, then Pearce is number one, and by the number of aircraft permanently stationed here, Pearce is second only to Amberley".

"By number of flying squadrons, apron space and overall personnel, it's about average."

FORCE STRUCTURE

As an advanced fixed-wing flying-training centre is Pearce's two training squadrons and myriad support formations, totalling around 230 uniformed personnel.

No. 2 Flying Training School (2FTS) is the primary training unit on the base, providing intermediate training with the Pilatus PC-9 for graduates of the

RAAF's Basic Flying Training School at BAE System's Tamworth facility (soon moving to East Sale).

During the 12-month course and more than 100 flying hours, students are taught the skills necessary to safely take off, handle and land the PC-9 on any airfield in any conditions, as well as gaining the standard instrument ratings necessary for aviators.

It is during this training that the pilots are streamed into the types of aircraft they will spend the first part of their careers flying, based on aptitude and service demand.

Royal Australian Navy helicopter pilots also receive part of their initial military flight training with 2FTS, before advancing to rotary-wing training at HMAS Albatross.

Around four such courses are held per year, with around 60 pilots graduating every year, depending on pass rates and demand.

Wing Commander Kershaw said it was not uncommon for a pilot, within 12 months of leaving Pearce as a graduate, to be flying on operations in the Middle East or elsewhere.

The second training squadron at Pearce is No.79 Squadron, responsible for lead-in training with some of those students of 2FTS selected for a career in fast-jets.

Operating around a dozen Hawk-127 advanced jet trainers, No.79 often assists the Navy during joint interoperability exercises, and is used in the training of Army Close Air Support Controllers in Western Australian training areas. As with the other two training squadrons, it has its own contractormaintained flight simulators. A third training squadron is also present at Pearce – Singapore's No.130 Squadron, and Standards Squadron with around 120 RSAF and contracted personnel supporting operations with the Pilatus PC-21.

While the Singaporeans run their own command and control system, they share the same messes, training areas, air operations planning forums, aviation risk management forums and standardisation forums as the RAAF training squadrons.

"It's just like having another squadron on the base," Wing Commander Kershaw said.

"We have a really good relationship with the RSAF here at Pearce."

Supporting the operation of these training units is No.25 (City of Perth) Squadron, responsible for airbase command and coordination, air operations coordination, mechanical equipment maintenance, air movements, air cargo handling, and base amenities-type functions.

These include physical and recreational training, chaplaincy services, basic administration services, logistics and others.

No.25 Squadron is also responsible for the same activities at Learmonth, with a caretaker staff of six personnel and two contractors stationed on site, plus Pearce's satellite airfield at Gingin.

Detachments from larger units with headquarters elsewhere also support the base – including No.2 Expeditionary Health Squadron; No.453 Squadron, which provides air traffic control functions; and No.3 Security Force Squadron, which provides base security in conjunction with civilian contractors.

Pearce also hosts branches of a number of Defence agencies, including Defence Support and Reform Group, which manages a wide range of estate maintenance and operational support services; Joint Logistics Unit (West), running a small warehouse on the base for materiel ordered through



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the national logistics chain; Defence Community Organisation, offering social services to the families of Defence personnel; and, 7 Wing of the Australian Air Force Cadets.

In keeping with the wider trend across Defence, the base also provides employment for a large number of contractors, both local and international.

In the former category is Perth-based aviation maintenance company Airflite, which provides support services for 2FTS, and Sydney-based Pel-Air, which has two aircraft onsite for target towing and other activities.

Multinationals with a presence at Pearce include BAE Systems, which supports No.79 Squadron; Lockheed Martin, which provides support services and training systems to the Singaporean squadron; and Canadian Helicopter Company, which has helicopters on the base responsible for search and rescue operations.

Infrastructure and base support services are provided by national contractors Transfield, Wilson and Veolia.

Wing Commander Kershaw siad that most days there were more contractors on base than uniformed people.

OPERATION SOUTHERN INDIAN OCEAN

An outstanding example of the base's utility was when Pearce came to world attention in 2014 during the search in the southern Indian Ocean for missing airliner MH-370.

As the closest major airfield to the Operation Southern Indian Ocean search area, Pearce played a key role in coordinating and hosting the multinational force of maritime patrol aircraft engaged in the opening months of the mission.

In addition to the base's local flying routine, up to 10 wide-bodied aircraft from China, Japan, Korea, Malaysia, New Zealand and the United States all operated from the base.



"There pretty much wasn't a spare bit of apron that didn't have an aircraft parked on it," Wing Commander Kershaw recalls.

This was not the only aspect of the search that Pearce had to contend with, however.

"One of the main activities for the base was actually accommodating all of the VIP visits.

"That might not sound like much, but a lot of effort goes into arranging a senior diplomatic visit," Wing Commander Kershaw said.

"We had very senior government representatives from nearly all nations involved in the search effort here to have a look, and provide their support for what was going on."

Surprisingly, the operation did not require any significant additional contractors or RAAF personnel.

"It was just a higher rate of effort for the people here who were supporting that, with some minor augmentation from within Air Force."

For its efforts during that operation, No.25 (City of Perth) Squadron was awarded the RAAF's annual Hawker Siddeley Trophey, as the Air Force's most proficient combat support squadron.

FUTURE CONSIDERATIONS

Though there are currently no plans to expand the infrastructure at Pearce, or to increase the tempo of activities at the base in the future, a gradual upgrading of existing infrastructure worth tens of millions of dollars is currently underway.

A new air traffic control tower and associated control systems will soon be introduced, while an

extension of the main runway is being planned to cater for future capability requirements such as the P-8 Poseidon maritime patrol aircraft, which will replace the AP-3C Orion.

Further modifications to base infrastructure are likely to occur as the PC-9 is replaced under the AIR5428 project.

This programme of asset replacement has been in place for some time, with new headquarters buildings, mess facilities, fuel farm and accommodation facilities having been constructed in recent years.

"I think with what you saw on Operation Southern Indian Ocean in 2014, the base is already quite well set up to support a large surge in activity," Wing Commander Kershaw said.

"So there hasn't been a need for an expansion of capacity."

When questioned on the future of Pearce, Wing Commander Kershaw seemed optimistic.

"The fact that Defence is planning all these upgrades, underlines the fact that Pearce is going to remain the primary base in the west, and also the primary fixed-wing training base for the Air Force for at least another generation," he said.

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Mitchell Sutton is a Perth-based security analyst, defence writer and consultant.

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By Mitchell Sutton

Of long concern to Western Australian business and government has been the vulnerability of the state's northern regions, rich in resources, yet geographically isolated, far from the country's major Defence hubs.

Exercise Northern Shield 2015 went some way to remedying these concerns, with 1000 personnel deployed to the Exmouth Peninsula in September in order to test the ADF's ability to respond to short-notice threats in the remote north-west.

The largest exercise held in Western Australia since 2013's Iron Moon maritime counter-terrorism drill, Northern Shield is to become an annual event, using forces from all three arms of the ADF acting in concert to counter a simulated transnational threat.

Colonel Brett Chaloner, Exercise Chief Controller, said that with this first run out, the ADF very much focused on trying to bring all the elements together.

"We've aimed to not only progress with practice and training at a deeper level, but also to indicate to the public what we're capable of."

The impression that the ADF is attempting to create with the exercise is clear - that despite the lack of forces in the immediate vicinity of north-west Australia, it can deliver a prompt combined-arms response for a wide range of contingencies.

"We pride ourselves on being incredibly agile, and extremely well integrated between the three services, with the ability to optimise the force, tailor the force to counter a threat, and then evolve with the threat," Colonel Chaloner said.

"The past 15 years of operations overseas have helped us to hone that capability and, over the past week, we've been able to demonstrate that we continue to have it."

Accordingly, exercise was designed to be a complex one, both in terms of the spectrum of threat and the ADF's response.

According to the scenario, the ADF was tasked with responding to a suddenly escalated transnational threat located in the area of the Exmouth Peninsula. The opposing force (OPFOR) was not solely a state actor, nor a terrorist or criminal group, but rather a threat borrowing elements from all three.

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The Joint Task Force would have to neutralise armed enemy infantry holding a group of buildings close to the sensitive Naval Communications Station Harold E Holt; intercept an unauthorised aircraft attempting to smuggle contraband into the country and force it to land; and then locate any remaining enemy in the area, all while activating the bare base at RAAF Learmonth.

"OPFOR had elements of all those contemporary adversaries that are out there right now," Colonel Chaloner said.

"The best thing about that was that it changed the normal paradigm of operation, blending flavours of all the possible into a hybrid threat to give the guys as big a challenge as we possibly could."

The ADF force dealing with this amorphous enemy had to escalate its response, expanding from naval surveillance operations once the threat had been positively identified.

The Joint Task Force Headquarters had at its disposal four separate sub-groups with which it could counter the threat. These were; a company of soldiers from 2nd Commando Regiment and the Special Operations Engineer Regiment; a Ready Combat Team comprised of an infantry company from Brisbane-based 6RAR, with support troops and Bushmaster armoured vehicles; a squadron of the Pilbara Regiment Regional Force Surveillance Unit with light patrol vehicles; and, an Aviation Group of four Tiger Armed Reconnaissance Helicopters. These were augmented by the RAAF's

Contingency Response Squadron, whose task it was to bring the Learmonth bare base up to full operational capability, in order that troops and supplies could be brought in by air, enabling air

operations to commence, in the form of F/A-18F Super Hornet fighter jets, Hawk-127 jet trainers, an AP-3C Orion maritime patrol aircraft, an E-7A Wedgetail AEW&C aircraft, a KC-30A Multi Role Tanker Transport, C-17A Globemaster and C-130J Hercules transports, and KA-350 King Air light transports.

All of these elements would liaise with WA Police and other local authorities where necessary.

Lieutenant Colonel Richard Niessl, the JTF Chief of Staff, said the key to operation was planning.

"There are always challenges when you deploy long distance, so it was pretty important for us to get that key planning done quickly, which enabled cohesion and integration to occur."

This high level of planning was a necessity, as each stage of the operation involved the fine coordination of air, land and sea assets.

The initial strike against the immediate threat of armed enemy infantry around the NAVCOMSTA on 19 September provides an obvious example.

More than 30 soldiers from 2nd Commando Regiment and the Special Operations Engineer Regiment were parachuted into the Exmouth Gulf from RAAF C-130J transports. They were supported in this role by an AP-3C Orion and E-7 Wedgetail, which provided continual intelligence, and had earlier surveyed the area.

After inflating and boarding their RHIBs in the water,

the commandos moved ashore, waiting until nightfall and the intelligence support of several F/A-18s, before rapidly eliminating the enemy with small-arms fire.

The town of Exmouth itself was heavily involved in the scenario, with the simulated enemy infiltrating the town to conduct surveillance and reconnaissance operations.

"We chose Exmouth primarily because of how remote it is, its proximity to the oil and gas platforms of the

North-West Shelf, and because the community there is very, very interested in their own security posture," Colonel Chaloner said.

"All of these things combine to make it the perfect place to train."

Community response to the intrusion appeared to be predominantly positive, as was demonstrated by the enthusiastic donation of local watercraft and their skippers to monitor the paradrop.

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Mitchell Sutton is a Perth-based security analyst, defence writer and consultant. He was embedded with Defence at Exercise Northern Shield.

"The theme will be similar, in terms of shortnotice contingency response, but we will vary the challenges," Colonel Chaloner said.

Exmouth Shire President Turk Shales said Exmouth was built for the Defence Force back in 1964, and so really was an ADF and American town.

"As far as this exercise is concerned, you have upwards of 800 to 1000 troops coming into a town of 2600 residents.

"A lot of businesses prosper very very well from having the Defence Force here, and it's been wonderful for us."

Increased Defence engagement with the region beyond the existing limited counter-terror exercises is set to become permanent with Northern Shield to become an annual occurrence.

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Command & Control

An online college for Wildlife Managers

Poachers are becoming increasingly sophisticated and determined with strong links between wildlife crime and international terrorist networks. Current industry-wide education efforts for game rangers can be improved upon dramatically.

High-target species such as elephant and rhino are being poached towards extinction.

Ranger tactics and technologies have often stagnated for decades due to a lack of funding, global awareness and a humanitarian prioritisation versus environmental focus.

There is no global, collaborative approach to meet the educational requirements of those entrusted to defend wildlife with the relevant military skills, which are unfortunately a necessity.

Botanists are not used to fighting drug wars, despite cocaine and heroin being plant derivatives.

Similarly, the defence of wildlife should not lie squarely on the shoulders of those who do not have the relevant experience to command and control antipoaching patrols and missions, which in reality are para-military operation regardless of how they are viewed.

If the conservation industry is going to be re-injected with the right skills to defend high-target species, then this must be done through long-term, structured education.

A series of discussions and workshops in southern Africa have identified that, currently, the largest industry gap is the lack of military skill-sets at wildlifemanagement level.

Coming off the back of World War II and the bush wars in southern Africa, the conservation industry was filled with the necessary people to carry out the difficult requirements of frontline conservation. These people knew what was required, they had the skills to make it happen and the job was done.

There is now a diminishing group of people in the industry who have a military or combat background.

A generation of wildlife managers have risen through the ranks from a conservation, wildlife guiding, scientific or farming background and now find themselves in a career position where they are managing units of rangers who carry firearms and are expected to respond to highlevel threats from poachers.

Much of the command and control skills that wildlife managers need to know are theory based and available at many specific training centers around the world. However -

- 1: Managers cannot leave their work place for long periods for training courses
- 2: Specialist trainers cannot go to every game reserve and park and deliver this management training one-on-one
- 3: Current classroom courses run for wildlife managers assume that each learner starts at the same skill level – and this is never true.

SOLUTION

An online college to teach command-and-control theory for wildlife managers.

- 1. Modern, online video-based training systems can move away from the classroom and use a number of tools to transfer knowledge and skills.
- 2. Online systems identify where the learner needs to learn.
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- 4. The learner can only progress when they have passed each module



- 5. The system handles most of the administration, marking, submission of results and tutorials.
- 6. It is user friendly, requires little computer knowledge and can be done where there is no internet connection.
- 7. The system is secure.
- 8. Access to an online community of learners will also aid learning.
- 9. The lessons will compliment the bigger picture of an international standards-setting process and qualification development. Both these initiatives are a collaborative global approach to defend high-target species through increased education for rangers.
- 10. Scenario-based training models will allow managers to implement their theory into practice in the workplace.

This online platform has been Current course curriculum is When completed, they will

designed in South Africa. being rewritten to form short, interactive video lessons covering a selection of subjects. The lessons will be followed by questions and immediate assessment. be marked into the learner's dashboard as completed and this will be reflected on a personal file, accessible by moderators and supervisors.

The framework of lessons will continuously evolve, providing ongoing training for wildlife managers throughout their careers.

The first lessons of command and control were launched to a restricted audience in May 2014.

grow the platform to serve a wider community.

If you would like a



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demonstration, then please email info@iapf.org

Special thanks goes to: Ruben de Kock from the Southern Africa Wildlife College for assisting to develop the concept and offering advice, review and encouragement; and,

Jack Greef from Ntomeni Rangers Services for assisting to workshop the concept, structure and lessons.

IAPF is reliant on the financial support of individuals, corporations and organisations who understand the urgent need to back determined efforts at the front lines of the wildlife wars. Please visit www.iapf.org to see how you can help.

GLOSE BUT NOT GLOSE ENOUGH

Australians recommended for the VC but not awarder

Corporal Arthur Lawrence Carson/Carlson DCM, MM 2nd Battalion AIF

THE HOLY GHOST

The old sergeant realised the seriousness of the situation. The enemy were bearing down from three sides on his beleaguered troops and, if given the chance, enemy snipers were poised to take a devastating toll among the ranks. Now they were at risk of being totally surrounded, surely to be either killed or captured. Jumping from the shelter of the ditch, the sergeant calmly walked across the face of the gully. The Diggers stared in awe as rounds whizzed past his head and others spurted at his feet – "Come on you sons of ANZACs" he yelled. "Come on and fight!"

Arthur Carlson was born Arthur Loritz Olsen, on the 2nd of May 1893 in Arendal Medans, Norway.¹ He was illegitimate at birth and his mother, Helen, later married Carl Hendrickson under the local tradition. Being now the son of Carl, Arthur adopted the family name Carlson.² The family grew with the arrival of sisters Heduig and Karoline. In ensuing years, Carl and Helen passed away and the three children were committed to a government-run orphanage. Arthur hated the place but was reluctant to escape for fear of leaving his young sisters. Finally he'd had enough and felt that if he did get away, he'd be able to gain work and send money to aid the girls. With that he fled the orphanage for freedom!

Arthur was able to secure work on an old windjammer and set sail on the first of many voyages to the far reaches of the world. All the time, Arthur sent money and small gifts to his beloved sisters. Of all the ports around the world, two stuck in Arthur's mind. One was Rio and the other, Sydney. It was here he decided to jump ship and try his luck in Australia.²

He was all of 16 and yet, in every sense of the word, a man. He roamed around Sydney odd-jobbing, trying his hand at anything and everything. However economic times were hard and being a foreigner meant work was not as readily available as he hoped. He decided to move further afield and, in July 1909, signed up on board the Chinese vessel S.S. Changsha, working his passage to the north-Queensland township of Cairns.

Over the next couple of years, he roamed the country from Cairns to South Australia, to Newcastle and back to Sydney, where he found work as a ships painter. With the onset of war in August 1914, Arthur, who was now living at a boarding house in Sydney's Balmain, applied for Australian citizenship. Strangely, his naturalisation certificate gave his birthplace as Cairns.² Enlisting in the Australian Imperial Force, he was allocated to the newly raised 2nd Battalion with the regimental number 1327¹. For reasons unknown, Arthur was discharged before the unit embarked¹.

Not to be deterred, he again enlisted, on 26 February 1915, and was again allocated to the 2nd Battalion, this time, as number 1733 and set sail on board the HIMAT³ Argyllshire in April 1915, bound for Egypt.

On 26 May, the little steam pinnace slowly towed the string of ships boats towards the stony beach. The rattle of machine gun and rifle fire was ever present and the whole area seemed to shudder, as shell after shell exploded. As the boats nudged the shoreline, Arthur jumped out and waded ashore.

"Right, you 2nd Battalion men, over here!" the officer in charge of the draft called out. Standing alongside the officer was a scruffy, unshaven Digger, dressed in the remnants of a rag-tag uniform. The scout got straight to the point – "Right, I'm your guide. Now we're gonna head up Shrapnel Gully. The whole bloody place is lousy with snipers, so you see me go down, then you follow suite – questions?" Before anyone could answer – "Lets move, before we get a shell up our arse!" With that, the guide was off, slamming a round into the breech of his rifle as he went.

Warfare was a cruel awakening for the newly arrived Diggers and it was clear that this 'great adventure' was not all it was cracked up to be. Arthur took his place in the front line as part of D Company and soon proved himself to be a quiet, competent soldier who was not easily frightened.

As spring gave way to summer, the problem of disease started to take its toll on both sides of the firing line. Arthur was not immune and in mid July 1915, was evacuated with gastritis. The illness kept him away from the unit for two months⁴. This was probably a godsend as he missed the carnage that was Lone Pine.

Illness again plagued Arthur when, on 19 November, he was evacuated with mumps, but returned to ANZAC on 1 December⁴ and was amazed to see the trenches bathed in snow.

The allied high command had also been busy, this time instead of planning another attack, they were planning the evacuation of Gallipoli. In what was one of the greatest deception plans in military history, allied forces were going to break contact and carry out the detailed evacuation of thousands of men under the very noses of the enemy. For the ANZACs it was to be a 'silent stunt'. Over a series of nights the Diggers and their Kiwi cousins were led by specially selected guides. Following faint lines of flour or salt on the trench floor, they made their way in complete silence along the trenches, down the guillies and past the many makeshift cemeteries. Many soldiers broke ranks, pausing for a moment to say a final goodbye to a fallen mate. "I feel like a bloody dingo skulking off in the night" one Digger whispered. "Yeah, I'm glad they can't hear us go" another replied.





Following their return to Egypt, the now battle-hardened Diggers went about a period of rest, retraining and refitting. Plans were afoot to double the existing AIF by splitting the battalions of the 1st Division to form the new 4th and 5th Divisions. A number of 2nd Battalion men would now go on to form the new 54th Battalion, 14th Brigade. Arthur was inwardly pleased when he learnt that he wouldn't be going to the new outfit but would remain with his beloved 2nd Battalion.⁵

On arrival in France, Arthur opted to become a stretcher bearer. This was where he thought he could do the most good. Never leaving a man untended, many a Digger owes his life to these unsung heroes who required unparalleled bravery to do their job. The stretcher bearers would venture out into 'no-mans land' in search of wounded from both sides and, unfortunately, were key targets for the German gunners and snipers alike, who would often ignore the protocols of the white flag and the Red Cross.

On 20 July 1916, the 2nd Battalion moved into the line. They took their positions opposite the south-west end of a little known village, the name of which would become infamous in the annals of Australian military history and send shivers down the spines of all those who experienced the carnage – Pozieres.

As the Diggers moved forward, the whole place was like a scene gone mad. Overcrowded trenches, staggering wounded, cowering men, constant shelling, screams of those buried alive in caved-in dugouts. If there was ever a hell on earth, then Pozieres was it.

On 23 July, in actions to take the strongly fortified stronghold dubbed 'Gibraltar', Arthur was wounded when he took a round in the buttocks. As his mate bandaged Arthur's wound he said, "You've won the lottery, you lucky bastard! This might give you a crack at a Blighty!"

Arthur returned to France on 15 February 1917, but it would be a further 10 weeks before he'd rejoin his mates in the battalion¹. A mere two days after his return, the 2nd was in action against the seemingly impregnable fortifications known as the Hindenburg Line, centring on the heavily fortified village of Bullecourt.

Arthur watched from the safety of 'Pioneer Trench' as two of his fellow stretcher bearers, Corporal 'Vic' Johnson and Private Harry Ringland, sortied out into 'no-mans land'. The pair were trying to reach a hapless soul caught up in the wire, waving a white handkerchief. As they carried the wounded soldier (a German) back to the relative safety of their lines, the enemy opened fire on the group, killing Ringland outright. Enraged, Arthur immediately launched himself from the trench and sprinted toward the isolated Johnson sheltering in a shell hole¹. Rifle and machine gun fire erupted from the German trench line, all centred on Arthur, who could do nothing but run, duck, pray and curse as the rounds whistled and splattered around him. As he rolled into the shell hole, Carlson took time to catch his breath. "Bloody hell Arthur, didn't know you could run that fast!" Johnson said with a smile.

Quickly assessing the situation, they prepared themselves to withdraw. Dragging the German with them, the pair sprinted from shell hole to shell hole, intent on making it back to their lines. As they paused to catch their breath, the pair could hear impassioned cries for help from several wounded men, all Victorians, trapped in the open or cowering in a number of shell holes⁸.

After one last burst, they were able to dive into the safety of the forward trenches. After turning over their prisoner, Arthur grabbed a quick drink of water and readied himself to head out again in search of the wounded Victorians. He found one and, throwing him over his shoulder, zigzagged his way back to safety. As he commenced to rig a white flag in preparation to venture out once again, an officer grabbed Arthur by the arm. "What are you doin mate – the bloody Hun will cut you down out there!" "We've got wounded blokes out there sir; someone's got to get them!"

As Arthur slowly climbed out of the trench, he made his way forward. He knew that at anytime, an enemy round could slam into him. He reached the first of the wounded and carried him back, then another and another. On his fourth trip he found a seriously wounded soldier, an elderly bloke right under the very noses of the German trench (OG1)⁹. As he bandaged the soldier's wounds another D Company stretcher bearer, Scottish-born Private Jim Paul arrived to lend assistance. As the pair carried the wounded man to safety a single shot rang out, and Paul dropped to the ground, dead – cut down by a sniper⁸. Immediately, Arthur heaved the wounded Digger over his shoulder and scrambled for the safety of his own lines. As the front erupted, a round slammed into Arthurs left hip and he tumbled forward into a shell hole, closely followed by the moaning Digger. He quickly took stock of the situation and set about stemming the flow of blood from his own wound. He knew that to stay there would be suicidal. He also knew he couldn't walk, let alone run. So he pushed the Digger to the rim of the shell hole and, taking a deep breath, launched himself up and over the rim. With rounds flying in all directions over his head, Arthur clawed his way forward, dragging the moaning Digger behind him. Another round slammed into the wounded man but the wound would have to wait, because if they stopped they would die. In what seemed an eternity, Carlson inched his way forward until what seemed a hundred hands reached up and dragged him and his charge into safety.8

The trenches were alive with stories of Carlson's deeds and the Commanding Officer of the 2nd Battalion, Lieutenant Colonel Stan Milligan, backed by supporting statements from two independent witnesses,⁸ had no hesitation in forwarding a recommendation for the Victoria Cross. In his comments, Milligan said that Carlson's actions, "did the battalion a great deal good" but made its members bitterly resentful, for there could be no question of who the Wurttembergers (the German unit opposite) were shooting at.

In a strange twist of fate, the recommendation for the VC was rejected on 16 May, with a notation that the mere saving of life was not to constitute grounds for the award of the Victoria Cross.⁹

OSE BUT NOT (HOSE ENO)

Australians recommended for the VC but not awarded

The commander of the 1st Brigade, Brigadier General Leslie, contested the decision and quoted previous incidences where the VC had been awarded for similar actions. Again the nomination failed⁸. A subsequent recommendation for the award of the Distinguished Conduct Medal, was submitted on 19 May 1917 and was gazetted the following August.¹⁰

Arthur's wounds were serious enough to warrant his return to England for hospitalisation. In early September, Arthur received a letter from Henry Wansbrough, a mate back in the battalion. Henry commented that they just heard of the award of the DCM and wrote "everyone who saw you "salvaging" the wounded as you did, reckon that if ever a VC was won, then you won it that day." He went on to say, "you were unlucky as one had just been awarded to Kenny¹¹ and I expect they thought one was enough at a time in this battalion"12.

Arthur was able to take 'day leave' and enjoyed everything that the nearby towns had to offer. He'd had a close brush with death and he knew that inevitably he'd have to return to the front, so he was determined to live every day as if it was his last.

As he was recuperating, Arthur met a wisp of a girl, Emmie Corbett, who worked in the hospital. The pair became somewhat of an item and Arthur's new-found footloose lifestyle, was instantly curtailed. The pair promised to write to each other, especially when Arthur received word in November of 1917, to redeploy to France

Luck wasn't on Arthur's side when a bout of venereal disease, a legacy of previous 'adventures', kept him from rejoining his unit until June. Finally back among his mates, he again prepared for battle. But it was different this time as he had Emmie to think of.

Again luck was against him when, a few weeks later, he was wounded, this time with shrapnel to the hand.¹³

Returning to duty on 4 August, he joined the battalion on the great push against the German Hindebburg Line. The Australians now enjoyed the open-field running where daily gains, unimaginable in the preceding years, were now measured in miles not yards. The turning point of the war came on 8 August when the line was finally breached. The German General Ludendorff declared it, "The Black Day of the German Army" - the day they lost the war.

On 25 September 1918, Arthur was promoted to corporal¹ and on 11 November, the war to end all wars, spluttered to a close -"all fini!"

Arthur was able to cross to England to be closer to Emmie. The pair had to make some definite plans for the future, as they both knew that with Arthur being a Gallipoli veteran, embarkation orders to return to Australia could come at any time. On 21 March 1919, the couple stood at the gangway. "I'll send for you Em – just give me a bit of time to get us set up, and then I'll send for you!" With that Arthur turned and walked up to the waiting troopship Kildonian Castle and set sail for home.

Arthur was discharged from the AIF on 9 July and, like so many soldiers, attempted to settle back into civilian life.

In October 1919, Arthur applied to the Australian government for assistance to bring Emmie to Australia. The application was successful and, following a difficult voyage, she arrived in Sydney aboard the Bahra Castillo on February 1921.

At this point, Arthur decided for reasons of his own to go by the name of Carson and the couple married in Balmain later that year. Arthur had personal issues, but the same dogged determination that carried him through the Great War, carried him onto becoming a devoted husband and loving father. The Carson's went on to have four children and went about raising their modest brood while Arthur worked for the Hunter River Steamship Company as a rigger and painter.

With the onset of the Great Depression, times got hard and steady work became scarce. In an effort to provide for his young family, Arthur decided to return to the military, this time in a reserve capacity. On 4 February 1936, Arthur shed five years from his age so as to ensure his enlistment, and became a member (No 428569) of the 55th Militia Battalion. Promotion came thick and fast when scarcely a day after his enlistment, an officer who'd served with him previously, recognised Arthur and promoted him to corporal. His third stripe following on 1 May.

As the storm clouds gathered over Europe, Australia found itself again at war. Arthur immediately volunteered for overseas service and, on 3 November 1939, was seconded into the 2nd/3rd Infantry Battalion, AIF, with the rank of acting corporal. Promotion to acting sergeant followed 10 days later.¹³

Embarking for the Middle East on 9 January 1940, Arthur was again off to war. During the journey, Arthur was summoned to his platoon commander. The zealous young officer put an ultimatum to Arthur – in essence, spy and report on the soldiers behind their backs. Arthur wanted nothing to do with this. It wasn't his nature and it certainly wasn't his leadership style. In his own words he'd "have no part in anything like this!" The upstart officer overstepped the mark when he threatened to reduce Arthur to the ranks -"here, I'll save you the bloody trouble!" Arthur said, tearing his stripes off and throwing them on the table. Later the Commanding Officer of the $2^{nd}/3^{rd}$ heard of the incident and unleashed a tyranny on the young officer, which finished with a curt command, "For god's sake you fool, give the man his bloody stripes back!"²

As the situation started to deteriorate in Greece, the ANZAC forces were quickly embarked to dash across the Mediterranean and bolster the beleaguered British and Greek forces that were digging in against the expected German assault. On 18 March 1941, Arthur strode up the gangplank of the troopship and set sail for Greece. The 2nd/3rd was deployed north and, in a frustrating campaign where infantry-on-infantry actions were scare, the ANZAC forces were involved in a game of hide and seek with the numerically superior German Air Force.¹⁴ The Diggers knew that exposing their positions would bring on a devastating attack from bombers or strafing by prowling German fighters, so they stayed concealed, all the while preparing defensive positions for the upcoming battle.

It was during this period that Arthur was involved in a brief skirmish, where his troops were pinned down by an onslaught of German fire. Realising the seriousness of the situation and the possibility of capture, Arthur jumped up and with rounds peppering the ground around him he rallied the younger soldiers. "Come on you sons of ANZACs, get up and fight". To a man they rose and ventured forward out of cover. The words, deeds and seemingly indestructible demeanour of Carson saw the younger soldiers dub him "The Holy Ghost".8

Unfortunately, on 4 May, Arthur was injured in a road accident; the injuries serious enough to warrant his evacuation to the 7th British General Hospital in Crete for treatment before being further evacuated to Egypt.¹

With the onset of the Japanese, thrust forces were required for the defence of the Australian mainland. Arthur, now confirmed in the rank of sergeant, returned to Australia via Ceylon and arrived in Melbourne on 7 August 1942¹. Actions to our north along the Kokoda Track were desperate and every man was needed. Arthur arrived in New Guinea on 21 September and immediately his unit set off for the front line. The march up the Owen Stanley

Ranges was gruelling. Arthur, now in his fifties, probably felt it more than others but his men were none the wiser as he not only carried his own pack and equipment, but that of some of the weaker soldiers, so as to maintain the pace of the group.

The dark impeding jungle was a myriad of twisted vines, fast flowing rivers, shattered tree trunks and rotting corpses. Japanese snipers seemed to be in every tree and the Diggers knew that every step could be their last.

On 23 October, the battalion was in the thick of battle around the area of Eora Creek village. The area was under heavy fire from mortars and machine guns and casualties were mounting. Arthur was in charge of the stretcher bearers and was busy keeping the treatment of wounded soldiers going. At around 1430 hours, a call came out for volunteers to carry a badly wounded Digger back to a battalion aid post, a fair way back along the track. Without hesitation Arthur volunteered to lead the party. Although warned of the dangers, the group still volunteered to go. Arthur gave a quick set of orders, ensuring that they had ammunition, water and field dressings before they were off struggling in the slippery conditions under the load of the casualty, equipment and stretcher. As the party made their way down the winding track, they were suddenly hit by intense enemy fire from both heavy and light machine guns. The group took cover and suffered their own casualties, being one dead and one wounded. Arthur knew that to stay put would be fatal, so he had those who could fight back provide covering fire, while he made a run for it to get more bearers. As he broke cover and skirted up the steep mountain track, enemy fire cut the branches around him, with one round nicking him as he ran. Although short of breath and stumbling in the ankle-deep mud, he knew he had to keep going. As the fire subsided he knew he was out of the engagement area and he paused, took a quick breath, a swig of water and then ran up the track towards the forward positions.

Running into the headquarters, he quickly explained the situation. "I need more blokes, my fellas are pinned down and I've got one dead and at least one wounded already and it will only get worse if we don't get moving!" Immediately another batch of volunteers came forward and, denying all offers to have his own wounds dressed, Arthur and the group were off.

Reaching the besieged party, Arthur quickly reorganised the group. His coolness and courage under the extreme enemy fire was inspirational to the soldiers around him.

The situation started to deteriorate as darkness set in. While the onset of dark would aid in the groups retirement, it would also make the track as 'black as sin' and any slip could cause a broken ankle, which meant yet another casualty.

Arthur's orders were sharp, clear and direct - one group providing covering fire while the others half drag and half carry the stretcher in short bounds across the broken ground to cover. In what seemed to be forever, the group edged forward to a point where they could stand up and with the others still providing modest rear protection, the bearer party as a whole pushed on to the eventual safety of the medical facility.¹⁴

As the party converged around Arthur, one of the corporals extended his hand. "I don't know how you bloody well got us through, but thanks mate!"

For his actions, Arthur was awarded a Mention in Dispatches¹⁵ for gallantry and distinguished service and the coveted Military Medal.¹⁶

Carson returned to Townsville in early March '43 and, in early October, he was posted to the 16th Training Battalion based in Bathurst

Arthur's World War II service came to an end with his discharge, in late August 1945.

In February 1947, the Carsons stood in front of Government House, Sydney. Emmie fussed over Arthur as they waited to go in. As she straightened his tie, Arthur grabbed her hand and said, "Enough is enough!"

"Well darl, I just want you to look your best when you get your medal," she said.

The Governor, Lieutenant General Northcott, was chuffed as he pinned the Military Medal to the left breast of Arthur's coat. "Well done sergeant, well done!" he said with a smile.

The more that Arthur tried to melt back into as normal a life style the more he was called back into the limelight. He was invited as the guest of honour to a number of dinners. He was also the subject of press reports and questions. He was even the subject of a radio serial depicting his actions and courage and, in 1956, the Australian War Memorial requested he pose for a formal portrait by the acclaimed war artist Harold Abbott.¹

Outside the limelight, Arthur had to also wrestle with the demons that haunted him. He was more reserved than normal by day but at night he struggled. He would often wake up screaming and bathed in a cold sweat in the middle of the night, as he relived each and every battle.²

In the mid '70s, the family decided to return to Norway for a holiday. Arthur looked forward to the trip as he'd lost contact with his sisters decades before. Bad luck plagued him from the outset, as he learnt that Karoline, a member of the Norwegian Resistance during WWII, had been killed during the war and his other sister Heduig had passed away a scant six weeks before his arrival.² Arthur's family were extremely supportive of the old soldier, especially as the brood grew with the onset of grandchildren. They loved the old man and he loved them. The man they dubbed "Popper"² was their hero in every respect.

In later life Arthur and Emmie moved into the Narrabeen War Veterans Home on Sydney's northern beaches, where they lived their lives in relative peace and harmony.

Arthur Lawrence Carson passed away on 26 June 1979.

Following a private ceremony, he was cremated and his ashes laid to rest at Woronora Cemetery in Sydney's south. His plaque is nestled in a modest, well-kept garden and the plate bears nothing of his awards for bravery.

But that's exactly as he wanted it, as he never thought himself a hero.²

Author's note: My sincere thanks goes to Julee Stephens, the grand-daughter of Arthur and Emmie for sharing the family stories, journals and photographs of Arthur. Also to historian Harry Willey for his contribution and depiction of Arthur's story in previous publications.

Notes

1 150 years of the Victoria Cross, 1857-2007, Crimea to Afghanistan, edited by Harry Willey, 2007

2 Personal interview with Julee Stephens (grand-daughter of Arthur Carlson, April 2010)

3 HMAT – His Majesty's Australian Transport

4 National Achieves of Australia: B2445, WWI Service Records, 1733 Arthur Lawrence Carlson/NX5027 A. Carson;

5 Official History of Australia in the War 1914-18 Vol III

6 AWM4 - Official War Diary 3rd Battalion AIF, dated 23 July 1916 7 Blighty, an Indian term for home, was a popular nickname for England among allied troops

8 Official History of Australia in the War 1914-18 Vol IV

9 This rule should not have applied to stretcher bearers, but, probably through a mistaken application of it by some higher

authority, that reward was not granted. (Official History of Australia in the War 1914-18 Vol IV, pge 498, sub note 33) 10 AWM 28, Recommendation Files for Honours and Awards, AIF,

1914-1918 War

11 4195 Corporal T.J.B. Kenny V.C. 2nd Battalion AIF 12 Personal letter to Arthur Carlson from Henry Wansbrough, dated 31 August 1917

13 Regimental number NX5027

14 Recommendation for the periodic award of the Military Medal NX5027 SGT A.L. Carson DCM

- 15 London Gazette 23 December 1943 16 London Gazette 27 April 1944
- 17 AWM Collection, ART31766

MILITARY FITNESS



For anyone who is a member of the military or who wants to join, fitness tests are a wellknown and often hated part of life. In past issues of CONTACT I've covered several fitness tests including the BFA, beep test, PESA and the Special Forces entry test.

However, in this article I want to introduce a slightly different fitness test that provides great feedback on your overall level of tactical fitness and which can be used in a team setting as a friendly competition that allows personnel of different heights and weights to compete on a relatively level playing field.

The Tacucal Strength Challenge

The fitness test is called the Tactical Strength Challenge and it was developed more than 10 years ago by Pavel Tsatsouline when he reintroduced kettlebells to the western world.

I'll let Pavel describe the challenge and then we'll look at the various aspects of the test and how to train for them.

"The Tactical Strength Challenge (TSC) is a strength competition consisting of three events; a three-attempt powerlifting deadlift; pullups for max reps; and, kettlebell snatches for max reps in five minutes. The Tactical Strength Challenge tests the three primary types of strength; absolute strength

using the deadlift, bodyweight-relative strength with pullups; and, cardiovascular endurance through kettlebell snatches. The three events test a unique trade-off between these abilities. While larger participants may have an advantage in the deadlift, lighter participants have an advantage in pullups, and the kettlebell snatch tests all participants equally."

There are several different divisions for the test but the most popular divisions are the men's open division (bodyweight pullups and 24kg kettlebell) and the women's open division (bodyweight pullups and 16kg kettlebell). There are also elite divisions using heavier kettlebells and weighted pullups, and a masters division.

Scoring in the competition is based on rank in each of the three events and after your rank in each event is added to a final score then the lowest score wins.

Training for the TSC isn't normally something that needs a great deal of focus if you are already on a solid tactical-strength and conditioning program. Kettlebell swings and snatches, pullups and deadlifts are all foundation exercises of such programs and so, in theory, military personnel should be able to pull off a solid TSC result with little or no notice.

That said, the competition does have rules, so it is important to keep the following in mind when training for each event.

Deadlift – the only equipment allowed in the deadlift is a lifting belt and chalk. You get three attempts and if you miss one attempt then you can't reduce the weight. When training, it is important to keep the reps relatively low, maximise the weight you can use (with correct form) and learn what sort of jumps you can make between attempts so that you can post a smooth opener a solid second attempt and then go for the win or a personal best on the final rep.

My preferred training scheme for deadlifts is one day per week of relatively heavy (80-90% 1RM) reps for 3-5 sets of 2-5 reps and then one day of either speed deadlifts at 60-70% 1RM or an alternate deadlift such as snatch-grip deadlifts. As the competition gets closer, reduce the reps on the heavier sets.

Pullups - in the TSC, pullups are a very strict affair. You are only allowed to use an overhand grip and you can choose thumbless or thumbs around the bar. Each rep must start from a complete dead hang and is only counted when the neck or chest touches the bar. Bad reps are not counted and if you miss three reps in a row your attempt is terminated. No swinging or kipping is allowed.

Training for the TSC pullups should focus on two areas. The first is controlled reps with a full

Developed from over 10 years of military fitness coaching experience Don Stevenson's new book "Couch to Commando" covers every aspect of military fitness training.

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BY DON STEVENSON PHOTO OF AUTHOR SUPPLIED

extension and making sure that your neck or chest touches the bar. While this may seem obvious, it is a major fault of a lot of people's pullups! I suggest multiple sets of very strict reps starting with a third to a half of your max reps and adding a rep each week while maintaining good form.

The other aspect to pullup training is building muscular endurance. So, I recommend one session a week of band assisted pullups with multiple sets of assisted pullups that are 120-130% of your current rep max.

Snatch – kettlebell snatch is a great test of endurance, grip-strength and toughness.

With five minutes on the clock, the secret to training for this is to learn to deal with the discomfort of going anaerobic. Start your training with sets of 10 snatches each arm and work on a smooth technique that minimises the strain on your grip. As your training progresses, increase the number of reps in each set and start to shorten the rests between sets. Add 1-2 days per week of timed intervals. As a goal, 100 reps in 5 minutes is a solid result, but it will take 125+ to be truly competitive. Why not set your team-mates a challenge and

run a TSC in the new year? Full rules of the TSC can be found at www.strongfirst.com/tsc-rules Good luck!



www.octogenstrengthcoach.com

PHOTOS BY BRUCE WILLIAMS





25.40





















On 10 October, the newest squadron in the AAFC was inaugurated at Weipa in far-north Queensland.

112SQN was officially stood up by Director General Cadets-AF Air Commodore Terry Delahunty at "a fantastic parade". RAAF's 37 SQN provided a C130 to take 80 cadets, representing all the squadrons of 1 Wing, from RAAF Base Townsville to Weipa to help the 30 local cadets of 112 SQN stage their first Wing parade.

Assistant Defence Minister Darren Chester also attended congratulating all involved.

Above: Cadet Warrant Officer Samuel Adams from 105SQN Mackay with Cadet Sergeant Dakota Ayles from 110SQN Bowen attended 112SQN's first Wing parade.

> Right: Cadets of the newly formed 112 Squadron march on parade.





Cadets from Training Ship Sydney enjoyed a personalised tour of the Tall Ship James Craig on 12 September.

TS Sydney is based on Spectacle Island in Drummoyne, home to the Naval Heritage Centre.

About 200 Air Force Cadets from across 2 Wing got an opportunity of a lifetime when they flew in the Air Force's state-of-the-art heavy-lift aircraft, the C-17A Globemaster III, on 30 October.

Cadets had the unique experience of lowlevel flying plus special take-off and landing procedures.

Cadets spent time on the flight deck and spoke with Air Force personnel about the jobs they do on the C-17. A fantastic experience that will be

remember for a long time to come.





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Royal Infantry

> COMBAT Camera Issue 01 is available as a print magazine.



This '**Infantry Special Issue**' was produced to mark the 60th Anniversary of the Royal Australian Infantry Corps.





MIS-MANAGED CHONCE?

Quite some time ago, a Chief of Army made a decision to introduce heady freedom of choice into the lives of soldiers. This idea was in response to a mass of complaints and negative publicity generated by the officially issued Terra combat boot and how the public was perceiving what Defence was doing about it - and a lot of other gear at the time too.

So, the solution was to introduce 'managed choice' to guell complaints. After all, how could a soldier complain if he or she had what they wanted?

However, the main verb here is 'managed', in that Defence would allow soldiers to choose their own equipment but from a list of brands and products tested and approved by them.

So, we get to choose, but in a limited fashion. This limitation to approved items gives Defence protection under occupational health and safety and is in line with their duty of care to soldiers. If Defence buys a product and issues it to you, they have or are considered to have assessed the risks involved and accepted them and therefore take full responsibility for anything that happens to soldiers because of that equipment. It's also assumed they will have contingency and remediation plans in place to deal with issues arising from the use of this equipment.

If you don't like what Defence gives you and you buy an alternate product - and that product is not approved - Defence has 'an out'.

But then 'managed choice' is born and Defence solves a known problem, but re-accepts the risks associated with approved products.

At this stage, managed choice only extends to footwear for Army and RAAF members. But we know that almost everyone is buying far more of their own equipment in order to better perform their roles, or to reduce the risk of discomfort and injury.

With this in mind, I ask "Why hasn't managed choice gone further?" I would certainly like this to happen. It's nice to have good gear but not so nice to stand out in a uniform crowd!

So why won't Defence take 'managed choice' further? I'd like to say that it's because of one issue, but, there are, of course, a lot of issues.

The big one is exposure to risk. Open slather means diggers would buy all sorts of gear from all sorts of producers. Some of this will be excellent quality made and sold by trustworthy companies and well worth the money. But there are unscrupulous people out there who don't give a rat's arse about quality

and will make cheap and nasty gear to sell for a quick profit. There are also, of course, plain old tightarsed diggers who will repeatedly buy the cheap shit just because it's cheap.

There are also issues around the release of Defence intellectual property, such as the colour and pattern specifications for Australian Mulitcam Pattern, which manufacturers would require access to to produce officially compliant products.

And, finally, there is a financial cost involved to Defence. Managed choice would require staff to administer, either as part of a current program office or as a program office of its own. There'd also be costs associated with setting up the regulations, standards and protocols.

As a side note, there is also a psychological and reputational barrier. The ADF has always provided for the modern soldier (with the exception of some dress-uniform items) and widely spins that its soldiers are 'the best equipped'. There is also an attitude that there should be no reason for soldiers not to want to use anything other than the equipment they are issued - because it is the best.

But we're all familiar with the adage 'equipped by the lowest bidder'. Though, hopefully, that may be changing.

Is there an argument for expanding managed choice? I very firmly say yes. Defence will have to administer it carefully, with thought, and fund it. But I think it would be well worth the effort.

The risk component has already been dealt with under the approved boot list and Defence has learnt that it can test products for compliance as well as authorise those products that are already manufactured to an acceptable military standard such as UK MoD, US DoD, Mil-STD and STANAG. Any good manufacturer can comply with those standards and they cut out the dodgy ones.

The intellectual-property issue is a pretty dead argument as it only relates to our cammo patterns and identifying logos such as the Broadarrow Mark, Rising Sun etc. Defence already manages its brand marks quite well. And as for protecting the new cammo pattern - well we all know that will 'leak' eventually, if it hasn't already. Reverse engineering is easier and easier these days. The reality is, Defence can only hope to stall its 'escape', but could reduce the risk of losing control by licensing its use.

So what about the cost in a cost-conscious environment? Personally, I don't see it as prohibitive - and the benefits of a managed-choice program

Email your comments, critiques, criticisms or death threats, to gearinsider@militarycontact.com

go beyond just keeping diggers happy. Think of having the whole Army as a product-and-design test-bed, that is almost self-funding! Actually, I guess it could put Diggerworks out of action. Or maybe their staff and funding could handle the managed-choice program. Interesting thought...

And the mental reluctance? I think we've all noticed that fading over the past couple of years. Do you know what I think could really drive

managed choice? Tiered equipment systems. Defence really likes the idea of having several

levels of equipment for combat and non-combat roles, as exampled by TBAS. I don't know about you, but I am noticing a growing example of have's and have-nots when it comes to equipment. The idea that not everyone is training for the same role needs the same equipment is incorrect and if your soldiers are prepared to make up for that shortfall out of their own pocket, who are you to

say no? It's the reason aftermarket load-bearing equipment is such a big business in Australia. There is definitely a place for an expanded managed-choice program and for the continued close management of what we have now. This becomes clearer when I tell you that the driver of this article is changes of suppliers on the boot list, recently advised to us. The Army list and the RAAF list are pretty much monopolised by just a couple of brands, because of supply issues and Defence's current disinterest in the 'managed' part of managed choice.





Both soldiers and Defence stand to gain from an effective managed-choice program, so let's either hope they will consider it further – or let us start pushing it further.

In reality, the choice could be ours.

MAIN: Aussie soldiers are formally farewelled on a parade at Gallipoli Barracks in Brisbane.

TOP RIGHT: Not all the tears shed before departure were for loved ones, as soldiers enter a 'gas chamber' in Canungra during their predeployment training.

BOTTOM RIGHT: New Zealand soldiers are briefed in the field during predeployment training at Canungra.

The second rotation of Australian and New Zealand Defence Force trainers left for Iraq on 3 November to take part in the Building Partner Capacity mission to train Iraqi security forces. About 300 Australian and 105 NZDF personnel left Brisbane as part of the combined Australia-New

noncombat training force known as Task Group Taji II. Farewelling the contingent in Brisbane, New Zealand's Major General Tim Gall said the first rotation had achieved good progress in the six months since the training mission began. "The Iraqi soldiers as well as their officers have been eager to learn the skills they need to push back Daesh and recover lost territory," he said. "Some of those we have

Zealand

trained are now taking part in the counteroffensive against Daesh. "The training we and our Australian partners have been providing

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has helped the Iraqi Army slowly regain their confidence in themselves and their equipment. "The Iraqis need to keep or increase this level of

or increase this level of confidence to have a far better chance of defeating Daesh."

The training provided by Task Group Taji covers weapons handling, shooting, combat first aid and other skills.

Commander of Australia's 7th Brigade Brigadier Adam Findlay, whose troops make up the majority of the departing force, said the troops had spent the preceeding few months conducting training focused on replicating conditions they may face in Iraq.

"Our soldiers are ready and well prepared for any challenge this deployment may bring," Brigadier Findlay said.



Photo by Corporal Steve Buckley RAF

The Red Arrows flew with Vulcan bomber XH558 for the final time at the Southport Air Show on Saturday 19 September with their V formation the undoubted highlight of the show. XH558 was the last airworthy example of the UK's Cold War bomber and 2015 was the delta-winged aircraft's final flying season.

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PARTING SHOT





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