

ISSUE 65

CONTACT

AIR LAND & SEA

MARCH 2020

THE AUSTRALIAN MILITARY MAGAZINE

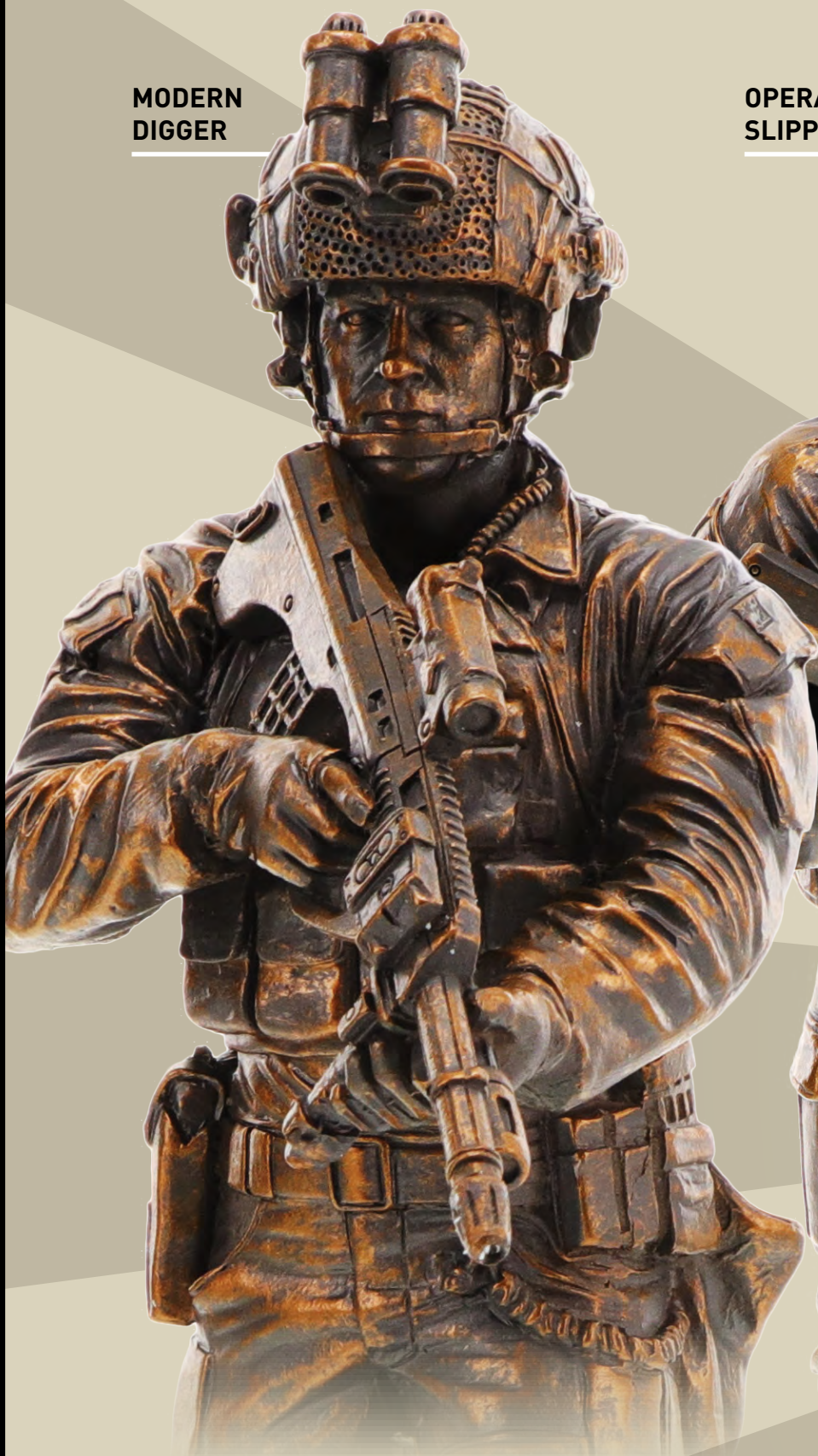
SHARING
THEIR OWN

BATTLE
SPACE

Tell your story

30cm cold-cast figurines with timber base

MODERN
DIGGER



OPERATION
SLIPPER



VIETNAM
DIGGER



WWII
DIGGER



WWI
DIGGER



AUSTRALIAN ARMY

Exclusive AU/NZ distributors of:

- Rochester Precision Optics
- Rock Face FR Undergarments
- RolaTube Masts & Antenna
- Crye Precision clothing
- Pure Hydration Filters
- Force Protector Gear
- Darn Tough socks
- Gentex Helmets
- TEA Headsets



Guardian Angel Elite Series

- Lightweight - approx. 85g
- Durable - Water proof, dust proof, shock proof, IP68 Rated
- Long Range Visibility - Rated up to 3 miles
- 360° degree illumination
- Built in Magnet Mounting System
- Low, Medium and High brightness settings

AND MORE !



Ops-Core AMP Headset

- 3D Hear-Through Technology
- Double Hearing Protection with optional Ops-Core NFMI Earplugs
- Mission Configurable Capability
- Quick Release Downlead Connections
- Noise Cancelling Microphone
- Integrated Microphone Mounting and Connection Point
- Auto Shutdown
- Fail-Safe Communications



Ops-Core FAST SF Helmet

- Super high cut ballistic shell
- Lightweight - 617g (small)
- Adaptable rail system for increased real estate
- Modular Bungee Shroud for snag hazard reduction
- Recessed channel in the molded liner to comfortably accommodate over-the-head comms; you can remove the helmet without removing your headset first!

- Chosen by US SOCOM



FibroTex Multi Terrain Camouflage System

- Two-dimensional multi-spectral camouflage suit
- Reversible design with different geo terrain on each side
- Full multi-spectral capabilities: UV, VIS, NIR
- Significant heat reduction
- Fire Retardant
- Weight: less than 2Kg

www.spearpointtechnology.com.au

Email: sales@spearpoint.net.au // Phone: +61 (02) 6298 1122 // 90 Bayldon Rd, Queanbeyan NSW

ISSUE 65 – MARCH 2020



60



18



52

10 The Big Picture
Taji QRF

12 Heads Up

18 TAG-East
Any where, any space

20 Assault Pioneers
Return to Canada

26 BUSHFIRE ASSIST
ADF's biggest effort

46 2RAR
Shaping their own battlespace

52 Winter mudbath
Irish bootcamp

56 Street machine
Blown G Wagon

60 Cope North
Tri-lateral exercise

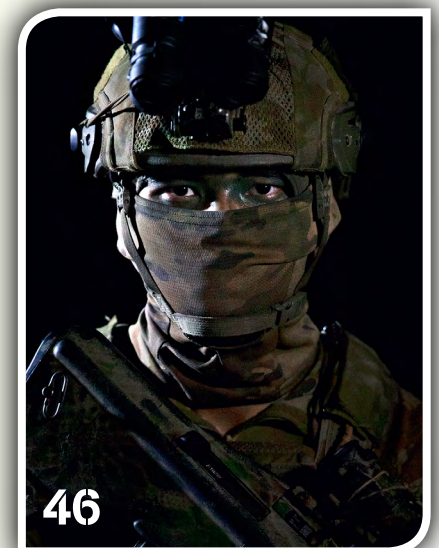
66 DFSW *Club*

68 Just Soldiers
Brunswick Boy

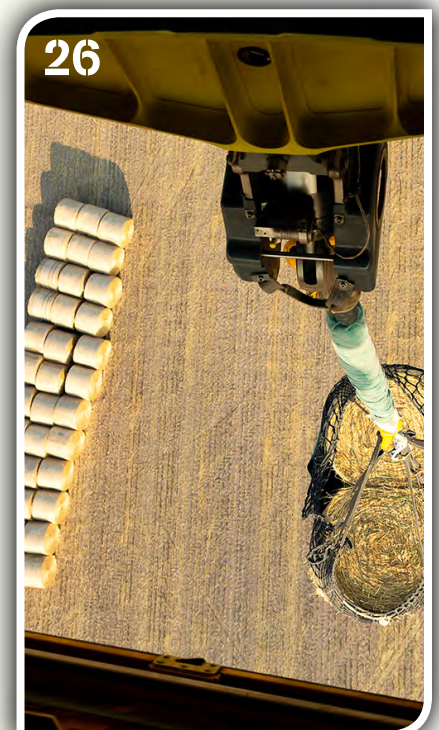
76 Q Store

78 Gear Insider
That big question

80 Out with a bang
Bombing of Darwin



46



26

CALL US FOR YOUR QUOTE

We really love helping create unique medallions and after so many years of working with Army organisations our designers know just how to apply the official badges to achieve outstanding results.

Phone: 02 6123 2950

MILITARY
SHOP

militaryshop.com.au
65 Kembla Street Fyshwick ACT

EDITORIAL

Issue 65 – March 2020

CONTACT
AIR, LAND & SEA



**2RAR SHAPING
BATTLESPACE**

Photo by Corporal
Tristan Kennedy

Starts page 46

Editor

Brian Hartigan
editor@militarycontact.com
ph: 0408 496 664

Art/Design

Brian Hartigan

Advertising

Brian Hartigan
advertising@militarycontact.com
ph: 0408 496 664

Business Manager

Rosie Hartigan
accounts@militarycontact.com
ph: (02) 4293 1010

CONTACT Air Land & Sea magazine is
Published by Contact Publishing Pty Ltd,
PO Box 3091, Minnamurra, NSW 2533, AUST

www.militarycontact.com (all info)
www.aussiecombat.com (free subs)
www.issuu.com/contactpublishing (archives)
www.facebook.com/CONTACTmagazine
www.youtube.com/CONTACTpublishing
www.pinterest.com/CONTACTmagazine
www.twitter.com/aussiecontact
www.patreon.com/contactmagazine

CONTACT Air Land & Sea is published on 1 March,
June, September and December. It is only published
electronically on the Internet and is available by FREE
subscription via www.aussiecombat.com

All editorial, advertising and general enquiries should
be addressed to the editor.

All material appearing in this magazine is protected by
copyright and may not be reproduced in whole or in part
without permission from the copyright owner (which
may not be Contact Publishing). The views expressed in
this magazine do not necessarily reflect the views of the
publisher or the editor. The publisher does not accept
responsibility for any claim made by any author or advertiser
– readers are encouraged to seek professional advice where
appropriate.

Little did I realise when I laid out a six-page bushfires spread in the December
2019 issue of CONTACT that I'd have to revisit the topic again in March.

Not only did I revisit the topic, though – it turned out to be the biggest story
every published in a single issue of CONTACT.

It also turned out to be the biggest story on Defence's books in many years
too – nearly 7000 personnel deployed.

And I have to commend Defence PR for a mammoth effort, pumping out
stories, photos and videos from all over south-east Australia.

CONTACT magazine's coverage of Operation Bushfire Assist 19-20, as it became
known, is about 8000 words and 18 pages long. There was easily that much to say
– and, unfortunately, much more besides, which didn't/couldn't be included.

On our web site too, we did our best to keep up with everything Defence's
army of PR people pumped out – publishing 175 news items on the CONTACT
web site to date (but, with deployed personnel gradually being stood down,
news coverage is quickly dwindling).

Thanks mainly to Op Bushfire Assist, the CONTACT web site has also set a
new audience record – reaching 1,000,000 page views for the year to date, on
24 February. It took us until 6 April to reach that same milestone last year, on
our way to a record 4.2mil for the year.

So, that's a top start to CONTACT's year. Now I just have to keep the stats
worm ahead of that curve :-)

Now that I've given Defence PR deserved praise for their Op Bushfire Assist
coverage, I have to also give a thumbs down to Army HQ PR.

Some of you may recall I [made a video](#) in January last year, about my visit
to Army HQ, where Deputy Chief of Army explained how he wanted to more
proactively engage with media such as CONTACT – and directed his PR staff to
make it happen.

Well, I'm sad to say, the 12-month report card reads poorly.

One story they wanted me to tell – about new boots – was promised and
repromised, but never showed up. And, the one and only time I asked for their
input (to a story already written by someone else (see page 20)), I was told
"Army media are experiencing a high work load at the moment..."

Well, let me tell them a thing or two about workloads — CONTACT is run
by just one guy and his wife, producing a yearbook, a quarterly magazine,
fortnightly newsletter, daily web site (and when I say daily, I do mean 7 days a
week), plus sundry publications, Facebook, Twitter, Pinterest, YouTube – AND an
email inbox that never lets up. Now that's a high work load.

But, as I wrote back to Army HQ (via a third party mediator – because dem's
da rulz), it's no skin off my nose if they don't actually want to play with me.
There are plenty others who do.

Just for the record, there was actually one other story in CONTACT magazine
that was longer than Bushfire Assist – my report of my experience aboard
HMAS Melbourne in the Middle East in 2012, which ran to around 12,000 words
– but was split up and published across four issues of the magazine.

I was going to suggest you go read that marvellous report in our digital
[archives](#), but alas, I haven't digitised those magazines yet.

Another task to add to my high work load :-)

Sincerely,

Brian Hartigan, Managing Editor

CARINTHIA®

MIG 4.0



EVOLUTION IS AT WORK
ISO BODY MAPPING + IR CAMOUFLAGE
= CAPABILITY PLUS.

Australian & NZ Distributor:
Premier Defence Agencies
www.premierdefence.com.au
E: info@premierdefence.com.au T: 02 9708 2475

QRF

Task Group Taji Quick Reaction Force Bushmaster protected mobility vehicles line up for a range shoot at the Taji Military Complex, Iraq. TG Taji QRF is responsible for base defence and regularly conducts patrols. They also provide 'guardian angel' security oversight for coalition forces training Iraqi Security Forces.

RANGE PRACTICE



Seven brand-spanking new F-35As at RAAF Base Williamtown. Photo by Corporal Craig Barrett.

AIRCRAFT DELIVERIES

Santa came early for the RAAF in December with several special deliveries.

On 6 December, RAAF held a final-delivery ceremony for its new trainer, the Pilatus PC-21 (and formally retiring the PC-9 soon after).

On 11 December, seven new F-35A Lightning II Joint Strike Fighters arrived at RAAF Base Williamtown, NSW – followed the next day by Australia's 12th and final P-8A Poseidon maritime surveillance aircraft at RAAF Base Edinburgh, South Australia.

And, on 21 December, a C-27J Spartan fuselage trainer was delivered to No. 35 Squadron at RAAF Base Amberley, Qld (see p52).

The F-35A delivery brings the total number operating at RAAF Base Williamtown to 13, with another five Australian aircraft based at Luke Air Force Base in Arizona, USA, in the international pilot-training pool.

Minister for Defence Linda Reynolds said the Australian government had also approved the next batch of 24 F-35As, meaning all 72 Australian aircraft are now locked in.

The PC-21 is an advanced pilot training aircraft and a key component of the \$1.5 billion Project AIR5428.

The P-8A Poseidon fleet will also get a range boost when the airport on Cocos (Keeling) Islands gets a \$184 million upgrade to handle large jets.

Cocos (Keeling) Islands are closer to Jakarta, Singapore, Kuala Lumpur, Phnom Penh, Bangkok and Colombo than they are to Perth or Darwin.

- Other new RAAF gear (not sure when it was delivered) was tested successfully in Antarctica in January.

Joint Precision Aerial Delivery System (JPADS), is essentially a GPS-guided steerable parachute system that delivers its load with high levels of accuracy – even in freezing conditions.

A C-17A on a non-stop 7000km round trip from Hobart made the successful drop in support of the Australian Antarctic Division.

TOOWOOMBA TO MIDDLE EAST

Anzac-class frigate HMAS Toowoomba departed her homeport of Fleet Base West in Rockingham, Western Australia, for a six-month deployment to the Middle East in early January.

This is the 68th rotation of a Royal Australian Navy ship to the region since 1990 and the sixth for HMAS Toowoomba.

This deployment is part of the Australian Defence Force's contribution to promote maritime security and stability – Operation Manitou.

Chief of Navy Vice Admiral Michael Noonan said Toowoomba's crew were ready for the mission following 12 months of preparations.

Commander Mitchell Livingstone and his ship's company have worked tirelessly to prepare for this deployment, and will form an integral part of the multi-national CMF," he said.

Vice Admiral Noonan also paid tribute to the families of Toowoomba's ship's company whose support was significant to the deployment.

"We ask a lot of the men and women of Toowoomba who leave their families and friends, but we also ask as much from those they leave behind."

HMAS Toowoomba is scheduled to return to Fleet Base West in July 2020.

AUSSIE AFGHAN MISSION CUT

Around 100 of the current 300 Australian troops deployed to Afghanistan are about to be brought home.

Australian troops will be withdrawn from the Train, Advise and Assist Command – Air (TAAC-Air), Command Staff Academy, Sergeant Major's Academy and national support functions.

Minister for Defence Linda Reynolds said Australia's role in the NATO-led Resolute Support Mission was evolving in recognition of progress made by the Afghan National Defense and Security Forces.

TOOWOOMBA ON SIXTH

HMAS Toowoomba is on a six-month deployment to the Middle East in support of Operation Manitou.

It is the 68th rotation of a Royal Australian Navy fleet unit to the region since 1990 and Toowoomba's sixth.

During her deployment, HMAS Toowoomba and her ship's company of around 190 personnel will support the International Maritime Security Construct* in its mission to ensure freedom of navigation through the Strait of Hormuz and continue Australia's longstanding effort with the Combined Maritime Forces.

Commander Combined Task Force 150 Commodore Ray Leggatt said Toowoomba's professional and motivated crew was looking forward to working in direct support of CTF 150.

"Royal Australian Navy vessels have a successful history working with CTF 150 on previous deployments and I am confident that this deployment will be no different," he said.

On her way to Bahrain, HMAS Toowoomba conducted a transit of the Strait of Hormuz with the Royal Navy's HMS Defender.

*The International Maritime Security Construct is a new organisation, established on 16 September 2019, in direct response to Iran's attacks on oil tankers. Australia and the UK were the only western allies to join the USA when it convened the IMSC. They have since been joined by Albania and three Arab states.



Petty Officer Sean Byrne watches from an MH-60R helicopter as HMAS Toowoomba approaches USNS Supply for replenishment at sea, on Operation Manitou. Photo by Leading Seaman Richard Cordell.

BOXER SIMS

Geelong company Universal Motion Simulator Pty Ltd was awarded a \$21.4 million contract to support driver-training simulators for the new Boxer 8X8 Combat Reconnaissance Vehicles.

The Deakin University-based company was awarded a \$32 million contract to build and deliver the simulators in 2019.

Defence is buying six driver-training simulators, with the first expected to be delivered in 2022.

JSF ENGINE MAINTENANCE

Queensland's TAE Aerospace has become the first company outside the USA to repair a Pratt & Whitney F135 engine from an F-35 Lightning II fighter aircraft.

The Ipswich company was named the Asia-Pacific Region's F135 Maintenance, Repair, Overhaul and Upgrade (MRO&U) depot in 2015.

Over the past five years, TAE Aerospace has been building facilities and working F-35 Program partners to achieve certification.

INVICTUS TEAM

Australia's 2020 Invictus Games Team was officially named in Sydney in Feb.

Thirty-two current and former ADF members were selected to represent Australia at the games in The Hague, the Netherlands from 9 to 16 May 2020.

View the team list [here](#).

P-8A -> N KOREA

Australia has deployed a RAAF P-8A Poseidon maritime patrol aircraft to monitor UN sanctions on North Korea.

The aircraft will operate out of Kadena Airbase, Japan, and conduct surveillance to monitor and deter illegal ship-to-ship transfers.

SUICIDE COMMISH!

PM Scott Morrison proposed a permanent suicide

commissioner with the powers of a Royal Commission.

Julie-Ann Finney, mother of former Petty Officer Dave Stafford Finney who committed suicide last year, rejected the proposal without a Royal Commission first.

She said the PM's proposed commissioner would only be informed by a review with terms of reference set by the same bodies that needed to be investigated by a Royal Commission.

AIRCRAFT SALE

In March 2020 Australian Frontline Machinery will auction 18 Pilatus PC-9/A 'Roulettes' plus gliders, Globemaster parts – even a never-flown Black Hawk shell.

The auction will also include tens of thousands of aviation parts and equipment in a range of conditions, including as-new and used, some with documentation.

The no-reserve auction, at Avalon, Victoria, will run from 6 to 19 March.



For sale by auction

CHESTER DOUBLE

Just for the record – Darren Chester is again known as the Minister for Veterans' Affairs and the Minister for Defence Personnel, after an 8-month stint as single-portfolio Minister for Veterans and Defence Personnel.

More details for all these stories can be found in our web-site News section, [here](#).

HEADS UP



Asn Electro Optic Systems RS400 Mk2 Remote Weapon System fitted to a Hawkei for a live-fire test.

contract with EOS brought Army a step closer to having world-class combat reconnaissance capability.

"These cutting-edge remote weapon stations will provide a superior self-protection capability for our Boxer 8x8 combat reconnaissance vehicle crews," Minister Reynolds said.

Rheinmetall Defence Australia is contracted to deliver and support 211 Boxer 8x8 combat reconnaissance vehicles (CRV) for the Australian Army.

CRV will replace the Australian Light Armoured Vehicle, which has seen extensive operational service since its introduction in 1996.

High levels of protection, firepower and mobility provided by Boxer will enable sustained operations, varying from peacekeeping to close combat.

NSW company Electro Optic Systems (EOS) has been awarded a \$45 million contract to supply remote weapon stations for the Army's new Boxer fleet.

Based in Queanbeyan near Canberra, EOS will deliver 82 advanced remote weapon stations for the Boxer 8x8 combat reconnaissance vehicles under LAND 400 Phase 2.

Minister for Defence Linda Reynolds said the signing of the

New Zealand Defence Force personnel were tasked with the gruesome task of recovering the bodies of six people killed in the Whakaari/White Island volcanic eruption on 9 December.

The recovery team included six NZDF explosive-ordnance-disposal specialists and a ground commander, with medical staff on boats nearby.

Working in pairs, the ground team moved the deceased to a central location, from where a RNZAF NH90 helicopter transported the bodies to

HMNZS Wellington, a short distance from the island.

Commander Joint Forces New Zealand Rear Admiral Jim Gilmour said the recovery operation had been well planned but was not without risk and he acknowledged all those who had put themselves in danger to achieve the outcome for the families of the six deceased and the community.

Two bodies, believed to have been washed into the sea, were never recovered. In all, 21 people died, including 14 Australians.



New Zealand Defence Force members set out to recover bodies on White Island, NZDF photo.

ARMY BUYS MOBILE TARGETS

Geelong's Deakin University will deliver additional robotics-driven target systems to the ADF.

Valued at over \$1 million, the contract will see the ADF receive six more RAIDER Mobile Moving Target Systems, which mimic tanks and light armoured vehicles, as well as trailers and thermal targets.

ARMY BUYS SPIKE LR2

Army will buy Rafael Spike LR2 missile as its long-range direct-fire-support weapon capability, under LAND 159 – Lethality Systems.

The long-range direct-fire-support weapon capability will enable our dismounted teams to engage armoured targets faster, at increased range, and with improved accuracy.

Spike LR2 will also arm Boxer.



EXCALIBUR HITS MOVING TARGET

Raytheon's new Excalibur S precision-guided artillery round scored direct hits on moving targets during recent US Navy tests.

Testing validated the projectile's ability to survive the shock and stress of a howitzer firing, then transition from GPS to laser guidance and hit a moving target.

SAAB COMBAT SYSTEMS

Saab has signed an agreement with Defence to provide combat management systems across all Royal Australian Navy major surface ships.

The tactical interface will be based on Saab's 'next-generation' Combat Management System (CMS) – the same as previously contracted for the new Hunter-class future frigates.

MEDALS



Get your replica medals, ribbon bars, clasps, accessories and medal mounting at the Military Shop. Best quality replica medals and top quality court mounting service with a 100% money back quality guaranteed.

1 Medal	2 Medals	3 Medals	4 Medals	5 Medals	6 Medals	7 Medals	8 Medals	9 Medals	10 Medals
\$50.00	\$100.00	\$150.00	\$200.00	\$250.00	\$300.00	\$350.00	\$400.00	\$450.00	\$500.00

To view our full range of medals and accessories visit militaryshop.com.au/medals

SPECIAL OFFER

Spend a minimum \$100 to receive 50% off!* Use coupon code:

JarrahNavy, JarrahArmy or JarrahAirForce at checkout!



*Offer expires March 15.

MILITARY
SHOP

militaryshop.com.au • 02 6123 2950

65 Kembla Street Fyshwick ACT

BIG PICTURE 2



An Australian Army soldier with Qargha Force Protection Company provides security during a task in Afghanistan. Members of Force Protection Element 12 are deployed to Camp Qargha, Kabul, to protect ADF and Coalition members on a train, advise, assist mission at the Afghan National Army Officer Academy. FPE-12 Guardian Angels are Australian regular and reserve soldiers providing security for advisors working with Afghans. Around 300 ADF members are deployed to Afghanistan on Operation Highroad.

MC
MASTER
CREATIONS

MASTERPIECES IN MINIATURE

20cm cold-cast bronze figurines!



Ph: 02 6123 2950

\$69^{.95}
each

MILITARY
SHOP

militaryshop.com.au
65 Kembla Street Fyshwick ACT

TAG-EAST ANY TIME ANY SPACE

Exercise Mars Mix was a show of strength and tactical response, Corporal Sebastian Beurich reports.

Exercise Mars Mix recently demonstrated the ability of 2 Commando Regiment's Tactical Assault Group – East (TAG-E) to respond to a number of different scenarios.

The exercise, completed late last year, tested core counter-terrorism skills in complex urban and maritime environments, with insertion methods including RHIBs, helicopter and free-fall parachute.

It was supported by Navy's MV Sycamore and Air Force aircraft including a P-8 Poseidon and two EA-18G Growlers, which provided electronic warfare effects.

Mars Mix was the latest in TAG-E's continuation training, which ensures they are ready to respond to terrorist incidents in support of State or territory police.

TAG-E comprises a commando company with an embedded platoon of Navy clearance divers, supported by a troop of engineers from the Special Operations Engineer Regiment, as well as other trade specialists.

Tactical Assault Group or TAG is an Australian special forces construct tasked to counter terrorism incidents in Australia on land or at sea, and with conducting overseas special-recovery operations.

Australia has two TAGs on line on permanent rotation – Tactical Assault Group - East, built around 2nd Commando Regiment in Sydney and Tactical Assault Group - West based on the SASR in Perth.



ASSAULT PIONEER

MAKES COMEBACK IN CANADA

BY STEPHEN J. THORNE, LEGION MAGAZINE
REPRODUCED COURTESY OF LEGION MAGAZINE

An age-old military tradition has returned to the Canadian Army just a few years after it was abandoned. Assault pioneers – long-known as the bearded, leather-aproned, axe-bearing innovators whose jobs originated with the Roman legions – are making a comeback, albeit with some modern twists.

Atached to infantry units, they have typically been responsible for manual labour and light engineering work such as road-clearing (hence, the axe) and specialised explosives work, making way for assault troops to proceed with their lethal tasks.

Usually about 10-men strong, they are the MacGyvers of the infantry units, coming up with novel solutions to unique problems or obstructions that usually impede the progress of the main body of troops.

The British Army's Royal Pioneer Corps defines the pioneer as a skilled worker who "leads the way, embraces a purpose, tough of spirit, far-sighted, and adventurous – the person who will prepare the way for an advancing army".

PREVIOUS PAGE: Canadian Forces School of Military Engineering students door-breaching.

THIS PAGE: Sergeant Andrew Rimmer, 2RAR pioneer sergeant on a training mission in the Philippines.

RIGHT TOP: Pioneer sergeant, 1st Battalion, Royal Anglian Regiment

RIGHT MIDDLE: Lance Corporal Grant Durich, a 2RAR pioneer.

RIGHT BOTTOM: Canadian assault pioneers.

NEXT PAGE TOP: Pioneer sergeant, Royal Regiment of Fusiliers.

NEXT PAGE BOTTOM: Canadian pioneers learn how to destroy a wire obstacle with explosives.



A history compiled by Roland Wardle, a re-enactor pioneer in the War of 1812-era 8th Regiment of Foot, says the earliest references to combat pioneers he could find was in the Bible's Book of Nehemiah, Chapter 4, Verses 17-18.

"They will build on the wall, and they that bear the burdens, with those that laded, everyone with one of his hands wrought in the work, and with the other hand held a weapon," it says. "For the builders, everyone had his sword girded by his side, and so builded."

Imbued with their own special esprit de corps, assault pioneers more typically trace their roots to ancient Rome, before full-fledged combat engineers, when the Roman legions needed advance parties to venture ahead to secure and clear the army's advance, often under hairy conditions.

Pioneers appear in the pay and muster rolls of the British Garrison at Calais in 1346.

By the 1600s, pioneer contingents under their own command were attached to the artillery and, later, with the 7th of Foot (Royal Fusiliers).

By 1739, the Foot Guards had organised and maintained a detachment.

The Black Watch and other infantry regiments followed.

By the 18th century, British infantry battalions were detailing sections or squads of pioneers under the command of a corporal or sergeant. Their main tasks were to perform or supervise heavy construction work.

Canadian forces fighting the First World War in Europe had at least a half-dozen pioneer battalions, including the 2nd Canadian Pioneer Battalion, Canadian Expeditionary Force, which distributed more than 1000 men among infantry units.



The 3rd Canadian Pioneer Battalion (48th Canadians) was attached to the 3rd Canadian Division; the 67th Western Scots (Pioneer Battalion) joined the Canadian Expeditionary Force in 1916 and the 123rd Infantry Battalion was repurposed as a pioneer battalion in January 1917. It replaced the 3rd the following May as the pioneer battalion of the 3rd Canadian Division. The 124th Infantry Battalion was also repurposed and became the pioneer battalion of the 4th Canadian Division.

During WWII, it was assault pioneers who did the so-called 'mouse-holing' in Ortona, Italy, blasting through the interior walls connecting Italian houses so combat troops could make their way up streets out of sight of waiting German snipers.

There are numerous stories of how the tradition of facial hair among combat pioneers came to be, prominent among them the assertion that their Roman commanders excused them from shaving because they had to be up and on their way in darkness, well ahead of the traditional infantryman.

"In theory at least, the principal distinction of the pioneer was his axe, apron and his beard, the only soldiers allowed to be unshaven in the otherwise clean-shaven army," Wardle writes. "The wearing of the beard was a privilege, because their task was considered so arduous in warfare. Away from the regiment and the niceties of formal camp life, they were permitted facial hair.

"However, it may have reflected the simple fact that because they formed the advance party, usually setting off before dawn, shaving in the dark was hardly a practical proposition. Like so many other privileges in the army, it soon became a requirement and, even today, it is expected of the regimental pioneer sergeant that he will grow a suitably impressive beard.

"In practice, however, beards were probably much more widely worn on active service than contemporary illustrations suggest."

In British army tradition, units on parade are led by a bushy-bearded pioneer sergeant wearing his leather apron and carrying an axe over his shoulder.

Bearded assault pioneers served with the Canadian Armed Forces in Afghanistan, but in the post-Cold War era, army planners eventually deemed the job redundant and not cost-efficient, so the pioneers were disbanded and their tasks handed off to combat engineer regiments.

Captain Colton Morris, an instructor at the Canadian Army's infantry school in Oromocto, N.B., helped design a new assault pioneer course. He told The Maple Leaf, the CAF's newspaper, that senior leaders have since come back to the idea that pioneers are a good investment for the evolving army.

"Engineers have a huge envelope of things that they're responsible for," Morris said. "And without the assault pioneers, they've been saying, 'we have many tasks and in order for us to maintain all those skills, we're running ourselves ragged'.



"Engineers and assault pioneers complement each other."

The pioneers' role in Afghanistan actually reaffirmed their value as the military shifted its emphasis to lighter, more mobile, and agile forces.

The former army chief, Lieutenant-General Paul Wynnnyk said the "new version of the assault pioneers will assist in maintaining mobility in complex terrain".

"So that means in mountains and, particularly now, in urban environments where skills like breaching come into play," he said. "Right now, that task is solely held by the engineers. They have to do things like fortify buildings, clear roadways, move obstructions and all sorts of other stuff. They don't have the personnel to augment the infantry."

The Canadian Army is now offering an assault pioneer course to infantry soldiers in both the regular and reserve forces.

"The intention is to increase retention," Morris said. "By bringing the assault pioneers back, we open up other options for privates, corporals, junior leaders – and even officers – to expand their breadth of experience."

This story caught CONTACT's attention, initially because it was illustrated with Australian Army photos. But we liked the informative story too – so we sought and were granted permission to reproduce it. We also asked the Australian Army if they would care to add anything from the Australian perspective. We were told (in a long-winded response) they were too busy.



AT4 MAN-PORTABLE SUPPORT WEAPON

Combat proven support,
in any battlefield



The AT4 provides a potent squad level capability against infantry-fighting vehicles, infrastructure and personnel with its range of maintenance-free warheads.

Lightweight, man-portable and fully disposable; the AT4 gives our soldiers proven capability for mission success

saab.com.au





In the previous issue of **CONTACT**, we reported on ADF support for bushfire-fighting efforts across a wide area of the south-east of Australia in what were officially called 'catastrophic' bushfire conditions.

As we now know, catastrophe did indeed strike – and the ADF efforts reported back in the December issue were chump change compared to what was to come.

As I write this, most of the fires are now extinguished – or at least under control – thanks to drenching rains, which have caused their own problems in many places.

But, we still love this sunburnt country, of droughts and flooding rains...

AS SIST

BUSHFIRE ASSIST



A major increase in Defence bushfire-fighting support was announced on New Year's Eve, with a significant injection of manpower and equipment to boost the bushfire-fighting effort, initially at the request of the Victorian government.

Black Hawks from Sydney and, at first, a single Chinook helicopter from Townsville moved south in preparation to rescue stranded residents in towns and hamlets cut off by fires.

Royal Australian Navy ships were also mobilised, to an area off East Gippsland in preparation for evacuations.

HMAS Choules out of Sydney and MV Sycamore out of Jervis Bay, both with significant capacity to land helicopters, and send boats ashore, were first to respond.

But this was just the start – and follow-on deployments ramped up quickly.

The effort now also had an official name – Operation Bushfire Assist 19-20.

On 2 January, HMAS Choules and MV Sycamore arrived off the bushfire-isolated Victorian town of Mallacoota – now famous for photos and video of townsfolk and holidaymakers alike huddled on the beach as fires literally lapped at the edge of the sand – to evacuate hundreds of locals and tourists.

Australian Defence Force personnel commenced evacuating more than 1200 people on the first day.

HMAS Choules, with a crew of 179, departed for Westernport on the Mornington Peninsula with about 1100 evacuees aboard, followed by MV Sycamore and her crew of 29 civilian contractors and one Navy officer, with 60 evacuees on board.

Journey time for both ships was about 20 hours.

CO HMAS Choules Commander Scott Houlihan said that for a bunch of people who had been through one of the most horrific experiences you can ever imagine, their spirits were high, they were joyful, they were a pleasure to have on board and it reaffirmed his belief in the human spirit.

"The embarkation was a key milestone achieved through close coordination with various government and non-government agencies," Commander Houlihan said.

"We quickly and effectively integrated with counterparts from Emergency Management Victoria, Victoria Police, the CFA, the local council, Red Cross and other agencies.

"The embarkation process started around 8am, with people being moved from the community centre to the pier by bus, and then moved across to the ships using five landing craft embarked in Choules.

"By early evening we had completed the embarkation and were underway heading towards Westernport.

"I could not be prouder of their efforts and the results achieved."

Executive Officer Lieutenant Commander Arron Convery oversaw the welcome of all evacuees on-board Choules.

"The general spirit among our guests has been one of appreciation mixed with relief to get away from the devastation and the heavy blanket of smoke that has engulfed the region," he said.

"Of course, there was some level of worry, but there were many hugs of appreciation throughout the day."

In addition to the human evacuees, hundreds of pets accompanied families.

"There were 135 dogs on-board, some cats, even a rabbit and a bird," Lieutenant Commander Convery said.



"The pets and their humans were comforted by being able to stay together for the transit, and we were pleased that we could facilitate this."

Commander Houlihan said a key counterpart from one of the partner agencies in the evacuation described the process as being 'organised and structured, without being sharp and brutal,' and he thought this described perfectly the attitude, flexibility and welcome demonstrated by Choules' and Sycamore's ships' companies – and was to become a hallmark of the entire operation, driven from the top down.

Commander Operation Bushfire Assist 19-20 Major General Jake Ellwood issued a Facebook video (and, presumably, also a 'normal-means' directive (since ADF members are not allowed to access Facebook over military means)) to his subordinate commanders, to guide their actions in the field.

Major General Ellwood's message was intended as both guidance and authority for commanders in



the field in directing the day-to-day activities of the increasing number of soldiers, sailors and airmen streaming into the field.

"The ADF's surge to support the Australian response to the bushfire emergency is to have an immediate, demonstrable and positive impact in order to support our emergency-management services and affected fellow Australians," Major General Ellwood said.

"[But] safety first – we are not to become a part of the problem.

"Get the priorities right. These will constantly change. I need you to watch, assess, amend and then act.

"Put others first. Provide our emergency-service personnel and affected civilians with what they need, when they need it.

"Lean forward and offer the best and most appropriate advice for our unique assets to best meet their needs.

"Do not put off to tomorrow what can be done today. We will be judged on our responsiveness – and we should be.

"Don't turn away anyone in need. If you don't have a solution, go and find one. If we can do it – and it's ethical and responsible – we will.

"Do not have our people or our assets dormant. If there is not an immediate task, think of a task that will need to be done tomorrow, and do it today.

"Be thoughtful and imaginative.

"Make us proud, like you always do.

"My thoughts and prayers will be with you all as you lean in, side-by-side with our fellow Australians at this critical moment in time."

This video message was received overwhelmingly positively on Facebook. In the words of one woman – "Major General Jake Ellwood your fellow servicemen have gone above & beyond in what you asked of them in your message here. They were super amazing from the moment of contact! Courteous, caring, considerate, compassionate and all with a smile! This made me feel so very proud to be an Aussie and I can't praise all on board HMAS CHOULES enough! Your command and families I'm sure will be extremely proud already but from the bottom of my heart... Thank you! for all that you've done and all that you will endure in the future. Stay safe... love your work. X Karen".

The Royal Australian Navy's largest and most capable amphibious ship, HMAS Adelaide, soon also joined the mission.

While there was little hoopla surrounding this announcement, it later emerged that the sailing was no small feat in so far as Adelaide was actually tied up in significant maintenance over the December-January period and mammoth efforts were required to wrap works up to allow the ship to sail.

Five Defence-industry civilians who were caught up in her short-notice departure were happy to stay on board as work continued even as she sailed.

News of international help for the ADF's Op Bushfire Assist was quick to emerge too – on top of copious actual civilian firefighting assistance already at work, but not covered in this story).

New Zealand's Prime Minister Jacinda Ardern confirmed that the New Zealand Defence Force would assist its Australian counterpart.

"New Zealand Army engineers and three NH90s twin-engine helicopters will be deployed to Australia to support them as they continue to battle the fires raging across multiple areas," Prime Minister Ardern said.

"This is by no means the only thing we can do to help, and we're at the ready and talking to our neighbours frequently.

"Even before we saw the smoke from the fires across the ditch, I know we were already thinking of our friends and neighbours in Australia.

"It's been devastating to watch from afar – I can only imagine what it feels like to experience it directly."

On 4 January the government announced a compulsory callout of 3000 Army reservists on Operation Bushfire Assist – the first time in Australian history such powers have been exercised.

The callout followed a meeting of the National Security Committee, which also resolved to deploy additional Chinook helicopters, a C-17 Globemaster, C-130 Hercules and C-27 Spartans – plus, a range of Defence bases were to be prepared and opened to receive evacuees.

In making the announcement, Prime Minister Scott Morrison said the rapidly escalating damage and the heart-breaking human cost, called for nothing less than an all-out response.

In the end, the total number of full-time and reserve ADF personnel deployed to Operation Bushfire Assist nudged 7000.

Major elements of the Army's 1st Brigade in Adelaide and Darwin mobilised almost immediately.

7th Battalion, Royal Australian Regiment's Ready Combat Team departed Adelaide early on 5 January to integrate with local authorities, volunteer agencies, and other ADF men and women already on the ground.

Darwin-based personnel from 1st Combat Engineer Regiment, 1st Combat Signal Regiment and 1st Close Health Battalion followed within 24 hours, to support evacuation efforts, emergency-service reporting networks, as well as medical, engineering and transport capabilities.

Despite thousands of personnel being on Christmas leave – some overseas, and some on well-earned admin leave after overseas operations – the escalation in deployment numbers was extraordinarily quick.

And, while the reserves 'call-out' was technically compulsory, it probably wasn't even necessary, such was the clamour for inclusion across all services – everyone desperate to help fellow Australians in desperate need.

For many ADF personnel, there was also a personal connection to the ongoing emergency through family and friends directly impacted by the fires.

When Petty Officer Helen Frank was packing her kit to join HMAS Choules at short notice on New Year's Eve, she was also getting updates on the fires near her parent's home in Orbost in Victoria's East Gippsland region.

A few days later that personal connection came to the fore when she was interacting with the first group of people to be evacuated from Mallacoota, just down the coast from Orbost.

"On December 31 when we got the call-up, I'd been getting photos from my mum showing the fires, which came within 2km of their house in Orbost," Petty Officer Frank said.

"So when I was talking to people in Mallacoota and they heard my parents' house was also in danger, we had that instant connection."

Able Seaman Liliana Kleber experienced a similar connection when interacting with evacuees.

She was due to travel to the family home in Tathra before she was called to rejoin Choules at short notice on New Year's Eve.

Not only was the New South Wales south-coast town again under threat, but the fires that devastated Tathra in March 2018 were still fresh in her mind.

"Most of my friends lost their houses in the first round of fires and our family home was only saved after a water-bombing plane flew over and spared it," Able Seaman Kleber said.

"If I wasn't on Choules I would have most likely been in an evacuation centre."

On land, tears flowed for one young Aussie soldier as she was reunited with her parents in Mallacoota when she choppered in to lend a hand as a 'called-out' Army Reservist on Operation Bushfire Assist.

Private Brodie Scott, an Army Reserve driver with 4th Combat Service Support Battalion in Melbourne, was delighted to take the chance to help out, especially in her home town.

"To know that mum and dad were still there during the fires was terrifying," Private Scott said.

"I'm really glad that they're okay, that the family home is still intact, and now that I've arrived I'm looking forward to helping out any way I can."

Sadly, for one Army officer, the bushfires couldn't have been much more personal as he was called out to assist in the cleanup of a fire that killed two family members.

Lieutenant Kynan Lang from 10th/27th Battalion, Royal South Australian Regiment, lost his uncle and cousin in a bushfire on Kangaroo Island on 3 January.

The same day, he received news he was also called out as an Army reservist to assist the Kangaroo Island community.

Dick Lang, 78, and his youngest son Clayton, 43, were killed attempting to return to their property after fighting a nearby bushfire for two days.

Mr Lang senior was a well-known 'outback pilot' in the tourism sector, while his son was a respected plastic surgeon in Adelaide.

Lieutenant Lang was supported by colleagues as he erected temporary memorials to his family at the place where they perished.

The motto of their unit – 'Pro patria', which, translated from Latin means 'For country' – a poignant reminder why they were called out to assist.

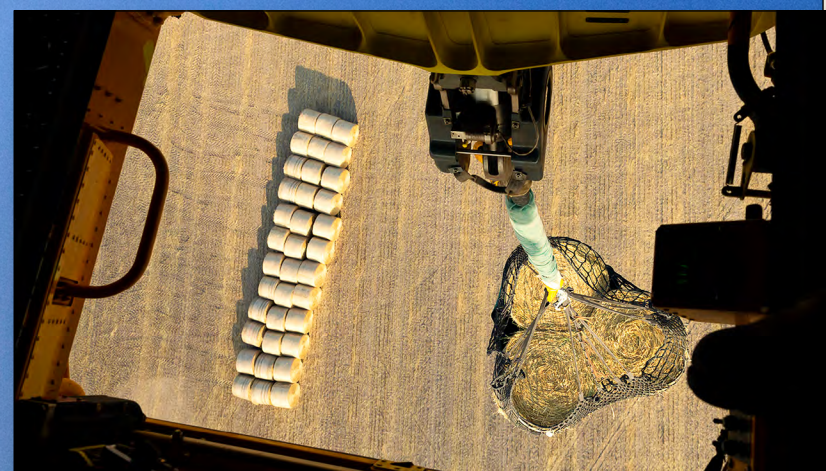
Warrant Officer Arthur Mitcherson, Choules' Command Warrant Officer, said the personal connection with the bushfire emergency had impacted many service men and women.

"It's a credit to our people that they can support these communities while at the same time knowing that their family or friends could be struggling or in danger," Warrant Officer Mitcherson said.

Almost simultaneously with the ship evacuations, aircrews from 5th and 6th Aviation Regiments, Australian Army, were busy helping State emergency services to air-evacuate dozens of people from bushfire-threatened hamlets in Victoria.

Black Hawk, Taipan and Chinook helicopters were in action on 4 January, with at least 42 people and a number of dogs air-lifted from Omeo in Victoria's high country at the start of what would eventually become a record-breaking effort.

Mount Hotham and surrounds were also covered by the operation, with at least five helicopters – two Black Hawks, two Chinooks and an MRH-90 Taipan seen on one footy oval at the same time.





Evacuees were taken to RAAF Base East Sale, which quickly became a major air hub for the wider mission.

Chinooks, in partnership with medical teams from 2CHC were also photographed evacuating people from the town of Orbost on Victoria's south coast.

By 6 January the first of the three Royal New Zealand Air Force NH90 helicopters picked up in Auckland by RAAF C-17, were ready for tasking out of HMAS Albatross, in Nowra, New South Wales, while a contingent of New Zealand Army combat engineers were deployed via a RNZAF C-130 Hercules to support the ADF efforts.

By 7 January, a force made up of engineers, logistics capabilities and personnel from Army's 9th Brigade had deployed to help with recovery and clean-up on Kangaroo Island – 7th Brigade deployed approximately 400 members to support operations

based at Gallipoli Barracks, set up and operated the system for weeks.

Lieutenant Mark Loneragan, of 6th Engineer Support Regiment, said WPDS was capable of producing up to 100,000 litres of purified water a day from the sea.

"Once established and initial supply is achieved, the system can continue to produce water under supervision, with regular maintenance undertaken by a small support team," Lieutenant Loneragan said.

Aside from heavy-lift aircraft, RAAF also put Poseidon's eyes in the sky to provide vital daily information to firefighting crews on the ground.

Operating out of RAAF Base Edinburgh, the crews from No. 11 Squadron flew eight to 10 hours a day conducting aerial surveillance of infrastructure and roads in fire-affected areas all across New South Wales, Victoria and South Australia's Kangaroo Island.

Wing Commander James Wright was in charge of P-8A operations and planning and said the crews had also been capturing imagery, which was passed to authorities on the ground.

"Our value is from the P-8A Poseidon's speed and the expertise of the crews to interpret what they are seeing on the ground, from a height of around 15,000 feet," Wing Commander Wright said.

"They can get from one target to another very quickly and this has proven to be a useful service to ground-based crews.

"Everyone wants to contribute in some way and our members have been really keen to support this operation," Wing Commander Wright said.

"Sadly, our crews were seeing homes and businesses destroyed but, importantly, they can then quickly assess the status of a township, which is useful for those on the ground who don't have our birds-eye view."

Other aircrews doing a big job were the C-27J Spartans, pushed to their limits in nightmare flying conditions.

In heavy smoke and poor visibility, the crews from No. 35 Squadron made essential contributions to airlift missions, especially around south-east Victoria.

Their missions included delivering supplies and specialist personnel into Mallacoota, and evacuating members of the civilian community.

The mission to Mallacoota was also supported by Australian Army Chinook, MRH90 and Black Hawk helicopters, contracted search-and-rescue helicopters, and the Navy.

The first Spartan landed in Mallacoota on the evening of 3 January and evacuated 25 people, but heavy smoke thwarted the first attempts to land in the town the following day.

Video of a Spartan crew flying through an eerie red glow generated by the smoke, attracted international media attention.

Improved conditions on 5 January allowed Defence aircraft to evacuate 381 people, with eight Spartan missions carrying out 243 of those – including 73 children and 15 infants, along with 13 dogs and three cats.

in NSW and Victoria – even 20th Regiment, Royal Australian Artillery, deployed a Wasp drone system and personnel to conduct reconnaissance operations in Victoria (and later in the ACT).

Army's CH-47F Chinooks (four assigned), MRH-90s and Black Hawks had by now shifted focus to distributing emergency food, water, fuel and medical supplies to communities isolated by road closures and active firefronts.

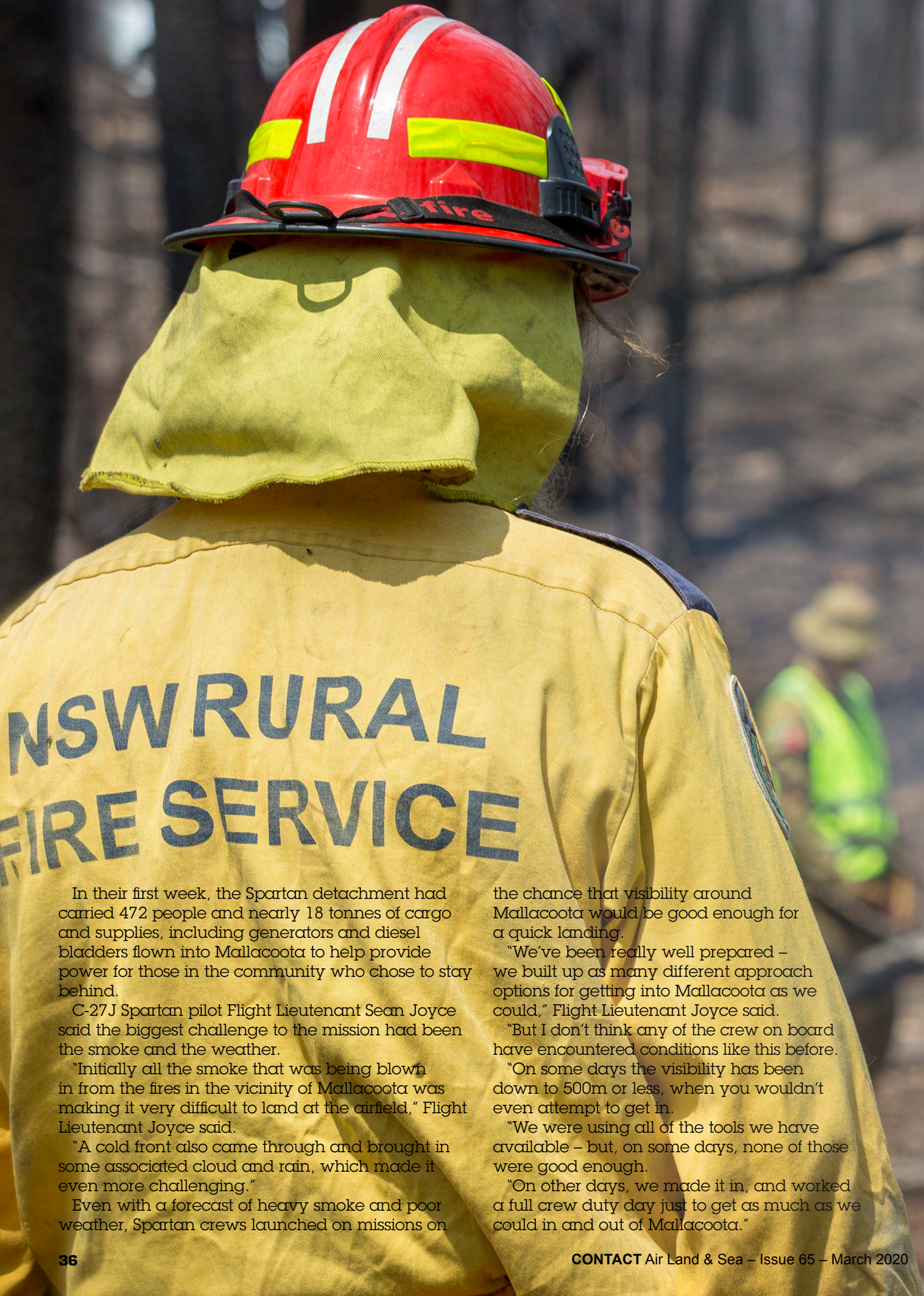
Two Singaporean CH-47 Chinooks were sent from their training base in Oakey, west of Brisbane.

Soldiers from 7RAR, already on the ground, borrowed a fleet of Bushmasters from the Army School of Transport at Puckapunyal to help with their taskings.

On 7 January, a C-17 Globemaster flew from Brisbane to Adelaide with a water purification and desalination system (WPDS) to turn sea water into drinking water for residents of Kangaroo Island.

The system was flown to RAAF Base Edinburgh, north of Adelaide, and transported by road and ferry to the island.

Nine soldiers from 6th Engineer Support Regiment, based at RAAF Base Amberley, and two health-support staff from 2nd General Health Battalion,



In their first week, the Spartan detachment had carried 472 people and nearly 18 tonnes of cargo and supplies, including generators and diesel bladders flown into Mallacoota to help provide power for those in the community who chose to stay behind.

C-27J Spartan pilot Flight Lieutenant Sean Joyce said the biggest challenge to the mission had been the smoke and the weather.

"Initially all the smoke that was being blown in from the fires in the vicinity of Mallacoota was making it very difficult to land at the airfield," Flight Lieutenant Joyce said.

"A cold front also came through and brought in some associated cloud and rain, which made it even more challenging."

Even with a forecast of heavy smoke and poor weather, Spartan crews launched on missions on

the chance that visibility around Mallacoota would be good enough for a quick landing.

"We've been really well prepared – we built up as many different approach options for getting into Mallacoota as we could," Flight Lieutenant Joyce said.

"But I don't think any of the crew on board have encountered conditions like this before."

"On some days the visibility has been down to 500m or less, when you wouldn't even attempt to get in."

"We were using all of the tools we have available – but, on some days, none of those were good enough."

"On other days, we made it in, and worked a full crew duty day just to get as much as we could in and out of Mallacoota."

They even flew an extended crew duty day on 5 January, allowing an additional 90 people to be flown out of Mallacoota before bad weather closed in on the following days.

While the flight from Mallacoota to East Sale takes less than an hour, Spartan crews did what they could to make the trip enjoyable for passengers.

This included providing children with lollies supplied by the Australian Red Cross, along with poppers and colouring-in books donated by the local community.

"It's pretty clear to us that they've been through a lot, but once they're able to get on the plane and get airborne, and they know they're being evacuated to a safe part of the community, they're pretty relieved," Flight Lieutenant Joyce said.

"They're really glad to get all the help."

Flying into small regional airfields is a mission that plays to No. 35 Squadron's strengths with the C-27J Spartan.

"We have a smaller physical footprint than larger transports, so we can have multiple aircraft on the ground at Mallacoota at the same time as other assets like Chinooks and Black Hawks," Flight Lieutenant Joyce said.

Mallacoota Airfield has two runways – one asphalt, the other unsurfaced – measuring approximately 1km long.

On these missions, the Spartan is able to take approximately 30 passengers or up to 2700kg of cargo.

No. 35 Squadron's Detachment Commander at RAAF Base East Sale Squadron Leader Mark Seery said crews carefully managed the Spartan's weight, fuel and tyre pressure when operating from Mallacoota.

"What you don't want to do is land on a runway and put any holes in the surface or damage it in any way so that other aircraft can't use it," Squadron Leader Seery said.

"No. 35 Squadron has been landing on the unsurfaced dirt runway, and taking off on the sealed runway."

"Our light footprint has made us really effective in operating from Mallacoota."

The Spartan's work was made easier by a No. 4 Squadron Combat Control Team delivered to Mallacoota on 5 January to help coordinate passengers for the Spartans, provide weather and airfield information, and assess the condition of the runways.

Further west, the ADF expanded its efforts to defend Kangaroo Island in support of emergency services and the community.

As of Thursday 9 January around 250 reservist and full-time ADF personnel were on Kangaroo Island.

ASLAV light armoured vehicles from 1st Armoured Regiment were conducting route reconnaissance and helping access hard-to-reach areas.

Bushmaster protected mobility vehicles were being used to drag fallen and felled trees off roads and lanes.



The desalination plant was fully operational, pumping out 100,000litres of drinking water per day from sea water.

Bulldozers and graders were clearing firebreaks.

And, Army truck drivers were helping to deliver hay donated by farmers on Australia's mainland to properties to feed livestock.

A fleet of aircraft were also on standby at RAAF Base Edinburgh to evacuate residents from the island should it be deemed necessary. Thankfully it never came to that.

And still more help was coming.

A large convoy of equipment and personnel from the 3rd Combat Engineer Regiment based in Townsville departed Lavarack Barracks on 12 January, bound for the fire zones of Victoria – to be partnered with a force of about 100 army engineers from the Papua New Guinea Defence Force.

The PNGDF contingent and the bulk of the 3rd Brigade personnel travelled the following day via RAAF C130 Hercules to prepare for the arrival of their convoy and to receive their orders.

A day after that, Fiji said it was sending an engineer platoon to help too – and soon after that, Japan said it was sending two C-130 Hercules.

As time progressed and with scores of bushfires still out of control, but with people largely out of danger, much attention began to flow towards animal welfare.

Many farm animals were starving on scorched earth. Even water was scarce in a lot of places, because infrastructure had been destroyed or dams had been sucked dry in the fire fight.

Cooma farmer George Walters was an individual who put a lot of blood, sweat and tears in to doing what he could – and then the Army stepped in to lend a hand.

"The whole community has gotten behind the relief efforts, but to have the assistance of the Army has been a massive boost," Mr Walters said.

"Some sheep, cattle and horses haven't had anything for days.

"We are now reaching farms and properties that desperately need assistance."

Private Shaun Whitehurst, an HX77 heavy-truck driver from Brisbane-based 7th Combat Service Support Battalion, was one of those tasked to help.

"I'm from off the land at Gin Gin, up past Bundaberg, so I know how tough farmers are doing it," Private Whitehurst said.

"It's a privilege to be able to get out and help – being here makes me proud to wear the uniform."

Army vehicles – even helicopters – distributed much-needed fodder for several days.

One of the biggest tasks after the fires was clearing fallen or dangerous trees from roads and roadsides all across three states.

While it was common and expected to see the engineers at the task, a closer examination of shoulder patches often revealed infantry, artillery or even RAAFies behind chainsaws or swinging axes.

The sight of the gunners wielding chainsaws may at first seem unusual, but the scene made perfect sense when you consider that artillerymen often

build gun emplacements in the field as part of their normal war-time operations.

But for others, new skills were taught and practiced as a matter of necessity in the face of the mammoth task.

Army Reserve infantry soldiers were busy across south-east NSW, armed with new chainsaw training and skills from the School of Military Engineering.

The fit and nimble soldiers had their skillsets enhanced with a special one-day chainsaw course in Holsworthy that qualified them in crosscut operations.

This training allowed them to cut up fallen timber so their teams can haul away the debris from roads, tracks, fences and properties.

Lieutenant Aiden Frost, 2nd/17th Battalion, Royal NSW Regiment, and team leader for the 5th Engineer Regiment Task Group's Strike Team 3, Response Team Alpha, said the bushfire crisis instantly focused the minds of all soldiers in the field.

"What I've noticed is that the traditional rivalries between units may still exist for the purposes of humour and rivalry, but the truth is that everybody here is a soldier first," Lieutenant Frost said.

"In the absence of normal coordination, it's been amazing to see people across the corps work together to make things happen and help the people affected by this tragedy."

The presence of the soldiers also gave a sense of hope to homeowners who lost everything.

Verona residents Jim and Enid Humphries lost their home to the fires north of Bega and were living in a tent for a while, but soon had a caravan to live in, thanks in part to the Army.

A new access track to their property was needed to circumvent the destroyed house but the path was blocked by burnt-out trees.

That changed when Strike Team 3 arrived, allowing a caravan to be hauled onto the property so the Humphries' could abandon their tent for a little more comfort.

Mr Humphries said the presence of the soldiers was an unexpected godsend.

"Without them I'd have to be into this with a chainsaw myself – and that wouldn't be pretty," the 75-year old said.

Other people were also pleased to see and interact with the military – no more so than in the towns and communities where medical teams were dispatched.

Members of Army's 1st Close Health Battalion arrived at the Batemans Bay evacuation centre on 7 January and, while they treated a trickle of patients, detachment commander Captain Kaiya Chen said most weren't physically hurt.

Instead, stories of burnt-out homes and shattered lives were shared as many people just needed someone to listen to their stories.

"I had a lady this morning, virtually in tears, just wanting to have a chat about the things she'd seen," Captain Chen said.

"A lot of the people have a story to tell and they just want someone to tell it to."



The 1CHB detachment included a doctor, two nurses, two medics and an Army chaplain.

During the first day of operation, duty medic Corporal Leigh Smith saw one elderly lady with smoke inhalation, and the rest of her cases involved mental health.

"Two had their houses destroyed, they were quite distressed from that," he said.

"They just wanted to talk – an ear – rather than the hospital or mental-health team."

Apart from primary health care, the detachment was prepared for resuscitation and stabilisation.

It also had a Bushmaster ambulance for evacuations or extractions from isolated areas if requested by state authorities.

The Army detachment worked alongside an Australian medical assistance team, which also positioned doctors, nurses and a field hospital at the evacuation centre.

Captain Chen said it was a wildly different demographic than normal military operations, but the Army team was very flexible.

"We all know the impact the fires are having on our communities, so we're all keen to support."

A small detachment from the 1CHB was splintered off and travelled far and wide – having driven from Brisbane to Bateman's Bay, then Eden and Coomera and eventually Tumbarumba and Batlow.

Army medic Private Brenden Walker said they weren't getting many enquiries at first, so they started reaching out.

"We visited the RSL club and started chatting with locals, some of whom started opening up to us," Private Walker said.

"We found out there were people in need, so we got some addresses and delivered some water.

"They were people who have lost their homes and were living out of their cars and vans, and we were able to help them and offer medical assistance.

"It was an honour to be able to come down and help out. I'm glad I was there when the call went out for people to deploy."

Elsewhere, two other medical soldiers found themselves in a unique position to use their skills to assist a Victorian community during the bushfires.

Captain Phil Barber, a nursing officer with the 4th Combat Service Support Battalion and combat paramedic Private Rod Scanlon found themselves manning the health centre in Bright after the town's civilian nurses were ordered to evacuate in the face of a looming bushfire threat.

"This definitely wasn't on our list of tasks for this deployment, but we've had nothing but unlimited charity and support," Captain Barber said.

Although not normally allowed to treat civilians while in uniform, Private Scanlon said the system had matured in recent years, allowing both military and civilian health services to recognise their qualifications.

"Paramedics have only just been registered with the Australian Health Practitioner Regulation Agency, which is the same recognition as doctors and nurses, which frees us up to work with civilian patients," Private Scanlon said.

"It's immensely satisfying and rewarding being here – both the responses we get from the local population, who have been tremendously grateful for our presence, and being able to get involved and build a connection with the community."

Their assistance was just another example of Australians' love of helping their neighbours, according to Captain Barber, who said Army had become like the "fourth leg of a stool" to the community.

"We're another element to support them, alongside the fires, the ambos and the police," he said.

"Everyone on social media says 'what can I do to help' – and for some that's donating money, or for others it's dropping water off at the Foodbank – but, for us, it's helping to staff the hospital."

There was even a baby-delivery story – nearly.

A woman ran into the Cobargo relief centre on 21 January saying her daughter was in labour.

Lance Corporal Archie Fallon called an ambulance, but he knew it wouldn't be able to reach the mum-to-be at Upper Brogo on the NSW south coast in time.

"I got on our radio to call up Army medics," he said.

Nearby, medic Corporal Kristie Connell was called off a task to respond.

"I was told to grab my kit, jump a fence and wait by the highway for pick-up because there's a lady in labour," she said.

Despite more than eight years as an intensive-care nurse, Corporal Connell had only limited experience with births.

She was joined by Private Nicholas Brimmer, who had helped deliver five babies – but only over the phone as an ambulance dispatcher.

They formed part of a team that took a winding dirt road through fire-ravaged hills to the home of soon-to-be-mum-of-six Sarah Tyrrell.

Fire had burned around Sarah's house for three days, but the home was spared thanks to lucky winds and the efforts of her husband Byron, who defended the property with a water pump.

"We found Sarah sitting on a beach chair, probably not the best position, but she was calm and we got her on the couch," Private Brimmer said.

"It was good knowing she wasn't crowning, but being the sixth child, it could come very quickly."

Private Brimmer tried to remember the emergency-birth checklist normally sitting on his desk.

Sarah was on a couch with towels tucked around her, contractions were timed and an off-site medical officer prepared for a video call if the baby came suddenly, and advised Corporal Connell in the event of imminent labour.

Police arrived, but still no sign of an ambulance.

Because of patchy phone reception, troop signaller Private Murray Richey set up satellite comms equipment.

"It was a good distraction for dad and the cops," Private Richey said.

"They were more fascinated with the signals stuff than getting in the way of the labour."

After about 30 minutes, an ambulance appeared.

On the way to hospital, Private Brimmer rode in the front passenger seat, while Corporal Connell assisted the paramedic in the rear of the ambulance, with lights and sirens on – and reached Bega hospital with just five minutes to spare before baby Ivy was born.

"I'll definitely enjoy telling this story," Sarah said.

"It's not every day you have the Army turn up to make sure your arrival is safe.

"I couldn't have asked for better help."

Speaking of ambulances – Army was asked to support the ACT Ambulance Service by providing ambulances, crews and familiarisation training when a State of Emergency was declared in the ACT on 31 January.

The G-Wagon six-wheel-drive ambulance and a Bushmaster protected mobility vehicle ambulance were express delivered with their crews to Canberra by a Royal Australian Air Force C-17A.

ACT Ambulance Service incident management team member Michael Hamill said they only had one four-wheel-drive ambulance in the ACT, so they needed the increased capability that Army had, to access difficult areas.

Private Sam Cantle, a combat medical attendant at 5th Combat Service Support Battalion – who is in the final year of a double degree in nursing and paramedics – said the familiarisation training she gave the ACT ambulance officers focused on the six-wheel-drive G-Wagon and the Bushmaster ambulance variant.

"They all know the medical equipment, so I showed them stuff like how to turn on the vents, because once the doors are shut, the space is sealed," she said.

"I also explained the importance of radio checks with the driver before we move off, so we know we have comms if something happens with the patient. Then I showed them how to get stretchers in and out."

The two vehicles were soon in action.

ACT Ambulance Service officer Commander Joel Powell said the Army ambulances were of great assistance to ACT authorities during the State of Emergency.

"It's important for them to be up here – we are in a very remote area where we don't have helicopter access," he said.

"We want to know that we have the best support available for the firefighters if something goes wrong.

"The ACT Ambulance Service can meet all its commitments on a day-to-day basis, but when we are pushed to the limits, we really appreciate the help."

As firefighting raged on across three states and the ACT, the scale of the effort was so unprecedented that Australia's stocks of water-bombing fire retardant were worryingly depleted – and, again, the military had a solution and volunteers ready, willing and able.

A RAAF C-17A Globemaster III collected the first 20-tonne load of critical fire retardant powder from Nellis Air Force Base, Nevada, and delivered it to RAAF Base Richmond, followed the next day by a second load on a RAAF KC-30A multi-role tanker transport. Even a Canadian CC-177 Globemaster

pitched in. More than 100 tonnes was eventually airlifted.

Another mammoth flying effort was achieved by the Chinooks, recording a record for the most hours flown in a month by the Australian CH-47 fleet.

Maintenance Troop Commander for C Squadron, 5th Aviation Regiment, Captain Amy Power, said hitting the 400-hour mark after a month was testament to her team's high-tempo deployment.

"We've done a lot of flying and the maintenance workforce have been working extremely hard to make sure the aircraft are serviceable and ready to go when required," Captain Power said.

Victoria's Emergency Management Commissioner praised the speed and scale of the ADF's response to the bushfire emergency.

Commissioner Andrew Crisp said Defence brought an impressive scale of forces to support the response, relief and recovery efforts, which meant results could be delivered quicker to affected communities.

"From planes to helicopters, from ships to plant and equipment, the sheer numbers of personnel and their assets which the ADF could get out on the ground on any one day was fantastic."

Commissioner Crisp also said the community response to ADF participation was valuable.

"ADF involvement brings a sense of confidence to the community," he said.

"People see the uniforms and feel safe.

"That's an intangible benefit and it had an equal, if not a greater, impact on relief and recovery."

A key factor that enabled close coordination between emergency services and the ADF was close working relationships.

Colonel Michelle Campbell, the Senior ADF liaison officer at the Emergency Management Victoria's State Control Centre (SCC) in Melbourne, said the rapid and agile Defence response had its foundations in lessons learnt from Victoria's 2009 Black Saturday fires.

"Previously, State-level ADF liaison was with each agency individually and that took a lot of time," Colonel Campbell said.

"Now, by being embedded at the SCC, we can liaise directly with all agency representatives to support the effects they were trying to achieve and it sped everything up."

Commissioner Crisp said the presence of the liaison officers helped emergency services staff understand what resources Defence had available and how their people and assets could be employed.

"Working with ADF liaison officers has been terrific," Commissioner Crisp said.

"Professionally and personally, it's been an absolute pleasure working with them."

As this magazine is finalised on 28 February, and with more than 3000 ADF personnel still deployed in support of what are now mostly cleanup and recovery operations, the inevitable questions arising from this year's catastrophic fire season are coming thick and fast – prominent among them, "Should the ADF be charged with a greater disaster-relief mandate?"



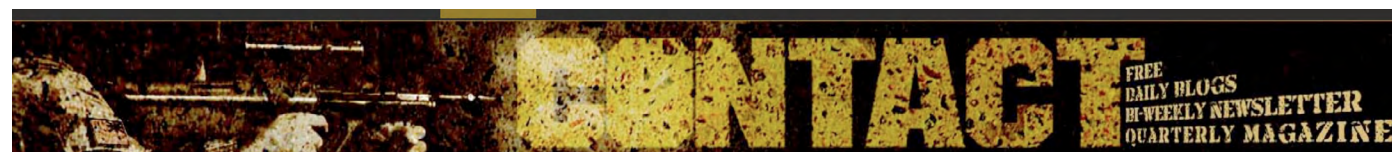
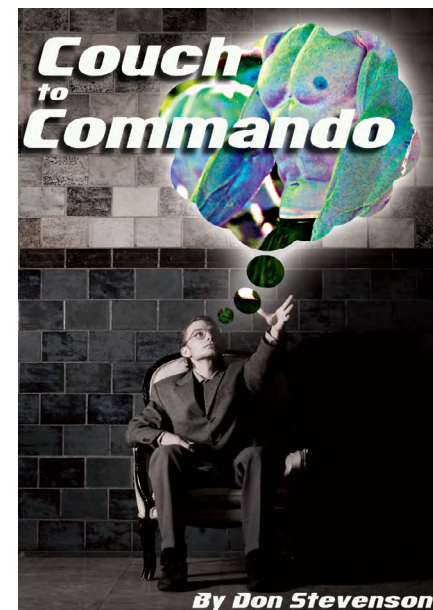
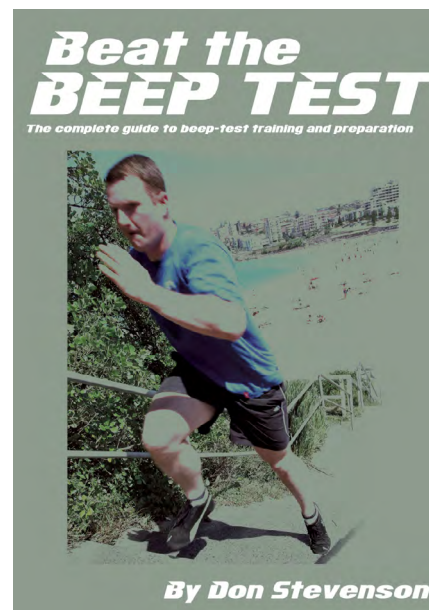
MILITARY FITNESS



“Modern military athletes cannot expect to get combat fit on a diet of pushups and running”

TWO IN-DEPTH FITNESS E-BOOKS BY DON STEVENSON AVAILABLE FROM ‘MILITARY FITNESS’ ON OUR WEB SITE

20%
of purchase price
will be donated to
Soldier On



CONTACT's Military Fitness Centre



MILITARY FITNESS with Don Stevenson
“modern military athletes cannot expect to get combat fit on a diet of pushups and running...”



Find dozens of free fitness articles on CONTACT web site



SOLDIER ON
HELPING OUR WOUNDED WARRIORS



SOLDIER ON IS ABOUT AUSTRALIANS COMING TOGETHER TO 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 WHATEVER THEY CHOOSE.

SOLDIER ON IS ABOUT THE ANZAC SPIRIT, AND MATESHIP AND ALL AUSTRALIANS KEEPING THEIR PROMISE TO TAKE CARE OF OUR WOUNDED WARRIORS.



INSPIRE, ENHANCE AND EMPOWER

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.



SoldierOnAustralia

WWW.SOLDIERON.ORG.AU



@SoldierOnAust

THE LITTORAL ZONE IS THAT WHICH IS WITHIN A CERTAIN
DISTANCE OF SHORE – ON THE WATER AND THE LAND

2RAR SHARING THE LITTORAL BATTLESPACE

Reconnaissance and surveillance continue to shape the battlespace for 2RAR, Corporal Julia Whitwell reports.

LEFT: Private Joshua Hill
BELOW: Private Kai Cooper
with 2RAR brothers



Surveying threats ashore, reconnaissance soldiers from 2RAR (Amphib) feed information back to embarked forces, spearheading Defence's amphibious operations.

Specialising in reconnaissance and small-boat platoons, 2RAR arrive days ahead of the maritime force to prepare beach landing sites and underwater lanes, conduct surveillance and enable battlespace shaping.

Commanding Officer 2RAR Lieutenant Colonel Judd Finger said the unit forms Army's component of, and commands, ADF's Joint Pre-Landing Force.

They are reinforced by clearance divers, geospatial survey teams, military working dogs, signallers and unmanned aerial vehicles.

"We're shaping the battlespace through the coordination of joint effects and have learnt a lot from the joint force and our coalition partners,

so we can continue to improve and evolve our capability," Lieutenant Colonel Finger said.

The 300-strong battalion, which calls HMA Ships Canberra and Adelaide its second homes, is also prepared to provide Army with an infantry battle group if required.

Soldiers focus on amphibious and force-level reconnaissance, coalition interoperability and manned-unmanned teaming.

"We are always focused on challenging dogma and learning best practice in order to provide scalable, tailored and lethal options to Australia's amphibious force," Lieutenant Colonel Finger said.

Based at Lavarack Barracks, 2RAR's support soldiers, including storeman Corporal Ben Laird, are proficient beyond their base trades.

"We get to deal with the infantry side of things more," Corporal Laird said.

"We fire Mag 58s, 66mm rockets, GLAs [grenade launchers] and get coded on the 40M, HX77 and G-Wagon [vehicles].

"We also have to do an annual swim test and helicopter underwater escape training.

"It's a positive culture and everyone has the same level of motivation. We all do the best we can.

"It's a high-morale environment where you always push for excellence because you know everyone else in the unit is doing their best too."

The ethos of 2RAR fuels the battalion through its high-tempo battle-rhythm, as its two Pre-Landing Force companies cycle between ready and readying.

The battalion also aims to train each infanteer in reconnaissance by 2021, while fulfilling its commitments to the Joint Warfare Series exercises and various operational and international engagements.

Last year, 2RAR deployed elements to the Middle East and Afghanistan, as well as on Operations Augury – Philippines, Townsville Flood Assist, and Render Safe in Solomon Islands, Tonga and Fiji.

This year the battalion will support exercises RimPac in Hawaii and Croix Du Sud in New Caledonia.

Small-craft operator Private Darryn Breugem said the battalion had become more specialised during his five years at 2RAR.

"A lot of the training we do is different to other infantry battalions, such as in amphibious reconnaissance and our small-boat capability," Private Breugem said.

"During APEC 2018 we were attached to a clearance diver team, inserting them into certain ports to make sure jetties and cruise ships were free of explosives.

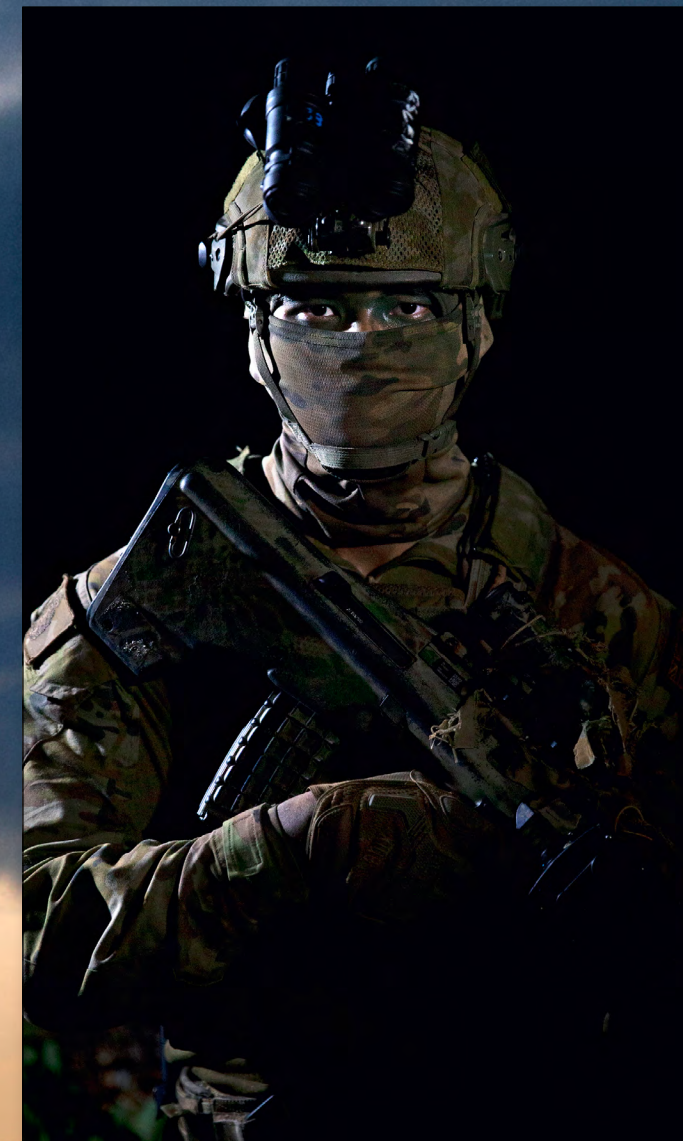
"We helped the divers survey the sea floor and, wherever they needed to go, we'd help get them there."

Private Breugem's small-boat skills also came in handy getting around Townsville's flooded streets in 2019, helping evacuate more than 400 civilians, including at night.

"There were white-water rapids on some of the streets and it was fairly shallow, so we were getting sucked towards storm drains and the water running back to the river and out to sea," he said.

"We had a sense of fear, but with the training we get, we knew what we were doing and that gave us confidence.

"Our guys persisted to get to everyone they needed to evacuate and we all got out fine in the end, leaving no one behind."



MAIN: 2RAR reconnaissance soldiers conduct an early morning insertion at the Cowley Beach Training Area, Queensland.

RIGHT: Private Seijin Chung.





2RAR

SHARING THE LITTORAL BATTLESPACE

ABOVE: Reconnaissance soldiers from 2RAR prepare to clear a 'village' at Tully Jungle Training Area, Queensland
TOP: Private Arlen Treston
FAR LEFT: Lance Corporal Sean Wilson

IRISH WINTER MUDBATH

Military robustness is a key element of recruit training.

Every Irish soldier, airman and sailor undergoes the same basic training and the members of the Irish Air Corps' 17th Recruit Platoon/77th Apprentice Class experienced this first hand in early December – in the dead of winter!

The Military Training School spent the previous two weeks instructing its most recent class of recruits on basic infantry skills before running them through a nice wee bath.

And, the Irish Defence Force's photographic section was dispatched to capture some memorable images.





Christmas present to...

SPARE THE SPARTAN

Words Eamon Hamilton
Pic Corporal Colin Dadd

A significant Christmas present landed at RAAF Base Amberley in December for Air Force's C-27J Spartan workforce.

The C-27J Spartan fuselage trainer will provide No. 35 Squadron with a dedicated static trainer that replicates the cargo compartment of a real aircraft. Measuring 22.7m, the fuselage was shipped from the United States, through the Panama Canal and across the Pacific Ocean, before landing in Brisbane, transported by road on its final leg.

It will be commissioned in the second quarter of 2020, releasing real C-27J Spartan airframes from the need to conduct ground training.

Warrant Officer Glenn Bennet, on the project delivery team, said this fuselage trainer was the main body of a modified G.222 aircraft, the predecessor to the C-27J.

"It is fitted to represent a C-27J cargo compartment to support the training of RAAF personnel," Warrant Officer Bennet said.

It includes a working cargo floor train payload restraint, on vehicles, pallets and more. The cargo ramp and paratroop doors can also be operated.

It is also connected to a power source that allows for operation of interior lighting and alarms to allow student loadmasters to rehearse for emergency scenarios in the cargo compartment.

This C-27J fuselage trainer had previously been installed at a facility in Texas, where the initial cadre of No. 35 Squadron personnel were trained.

Air Force has similar training devices for its C-130J Hercules and C-17A Globemaster workforces.

Officer Commanding No. 84 Wing Group Captain Nicholas Hogan said the C-27J fuselage trainer would have a variety of applications.

"The primary focus for the fuselage trainer will be on the loadmaster workforce at No. 35 Squadron – and technicians will also gain familiarity with Spartan through this device," Group Captain Hogan said.

"The wider Combat Support Group can also expect to benefit from this, especially air movements personnel and aeromedical evacuation teams.

"It could also have potential applications for developing new load-carrying techniques.

"New vehicles or other payloads that Defence may want to transport on Spartan can be loaded onto the fuselage trainer, allowing us to produce the documentation required to fly them on a real Spartan."

The fuselage trainer will be modified after commissioning to better reflect the configuration of Australia's C-27J Spartan fleet and to further enhance the training benefits that the device can provide.



To find a Retailer or for Retailer or Retailer Enquiries:
Australian Distributor
Premier Defence Agencies
PO Box 5411 Chullora NSW 2190
Info@premierdefence.com.au
www.premierdefence.com.au

CUSTOM WEAR BY TACTICALLY JADED

SUIT UP YOUR SECTION

GEAR UP YOUR UNIT

OUTFIT YOUR BATTLE GROUP

ARMY. NAVY. AIRFORCE.
admin@tacticallyjaded.com.au

0458 762 099
www.tacticallyjaded.com.au

GEE THAT'S SOME WAGON

This beast may not be a tank – but it ain't far off!

Packing an engine from an ASLAV – suitably tweaked, bored, balanced and blown – and a gearbox from an M113A1, this Mercedes Benz G Wagon is a hybrid of the massive variety.

Built by Team Army and friends, 'Matilda' is the third beastie to join the high-powered mechanic-recruiting roadshow.

'Project Matilda' and the much older 'Project Digger' were on display – along with a range of other, more conventional military vehicles – at the V8 Supercars season-opening weekend in Adelaide in February.

Promoting Army's trade capabilities to the public, Team Army is designed to heighten awareness of the technical trades available as jobs in the Army.

"The Army is a high-tech organisation and there's a big demand to recruit and train technical tradespeople," a Team Army spokesman said.

"We have to compete with mining and a number of other industries to stimulate interest in technical trades and attract people to join us."

In that respect, Team Army's highly modified vehicles certainly turn heads.

So, what's the skinny on this latest addition?

Well, based on an in-service Mercedes G Wagon 6x6, it apparently took four years to build.

The all-important engine is a Detroit Diesel 2-stroke 6V53T from an ASLAV, with 53 cubic inches per cylinder for a total of 318 cubic inches – or 5.2 litres in the other money.

But of course, it isn't stock standard – incorporating a marine-engine rebuild kit, special-grind camshafts, balanced crank, rods and pistons, an 8.71 Bob Fisher supercharger sitting atop two turbos – and a host of other custom parts, connected to the M113 gearbox, through custom diffs and suspension to four rear wheels that can all burn rubber at the same time!



Project Digger in action.



PROJECT MATILDA



ABOVE: Team Army's Craftsman Margaret Finau with Project Matilda at 'Defence Corner' during the Superloop Adelaide 500.

RIGHT: A Royal Australian Air Force 'standard' G-Wagon surveillance/reconnaissance vehicle on a lap in Adelaide.

BOTTOM: Team Navy's Leading Seaman Marine Technician Colin Wilson (left) and Able Seaman Electronics Technician Joshua Wakefield, on the Navy Industry Outplacement Program, check equipment in the Tickford Racing garage.



The Australian Defence Force has proudly showcased its capabilities through technology and teamwork at the Superloop Adelaide 500 from 20 to 23 February 2020.

A RAAF F/A-18 'classic' Hornet from Number 75 Squadron based at RAAF Base Tindal performed an adrenaline-pumping aerial display on both race days and a low-level flypast over pit straight before the main race on the Sunday.

At 'Defence Corner', supercar fans browsed through Defence displays featuring Team Army's street machines, 1st Brigade's armoured vehicles and various RAAF Base Edinburgh equipment and capabilities.

Defence Force Recruiting career staff were also on hand with information and resources to get career journeys started.

ADF participation in the Adelaide 500 provided the opportunity to showcase local Defence capabilities and importantly highlight the dedication and commitment of our ADF men and women who serve at home and abroad on operations.

Team Army and its 'street machines' will display at many more events around the country this year –especially those with a mechanical/technical bent. Keep your eyes out – and your ears well covered!

Reap the rewards of the best Defence
Discount program in Australia

SAVE THOUSANDS OF DOLLARS ON
your favourite brands

JOIN TODAY
www.apod.com.au

BAKER BALLISTICS

Level III+ & IV Ballistic Shields
Designed for Active Shooter Response

360 DEFENCE
.COM.AU

ORDER NOW;

MILITARY FITNESS

TWO IN-DEPTH FITNESS E-BOOKS
BY DON STEVENSON AVAILABLE FROM
'MILITARY FITNESS' ON OUR WEB SITE

Beat the BEEP TEST
The complete guide to beep-test training and preparation

Couch to Commando

By Don Stevenson

By Don Stevenson

20% of purchase price donated to Soldier On

COPE NORTH



The Royal Australian Air Force deployed 13 aircraft and 373 personnel to focus on interoperability with United States and Japanese counterparts as part of Exercise Cope North in Guam.

Exercise Cope North at Andersen Air Force Base was held from February 12 to 28.

It is a long-standing joint military exercise that aims to improve combat readiness, humanitarian-assistance procedures and interoperability between the forces of the United States, Australia and Japan.

Australian contingent commander for Exercise Cope North Group Captain Hinton Tayloe said the exercise had proven to be an effective way to strengthen military partnerships, common understanding and interoperability.

"More than 2300 military personnel and approximately 100 aircraft from the Royal Australian Air Force, United States Air Force, United States Navy and Japan Air Self-Defense Force participated in this exercise," Group Captain Tayloe said.

"This exercise began with humanitarian-assistance and disaster-relief training followed by air-combat and large-force employment training.

"Exercise Cope North allows us to continue to refine our procedures to operate more effectively alongside our military partners in the region."

Royal Australian Air Force personnel included elements of Air Combat Group, Surveillance and Response Group, Air Mobility Group, Combat Support Group and the Air Warfare Centre.

Eleven F/A-18 'classic' Hornets, an E-7A Wedgetail airborne early warning and control aircraft, a KC-30A multirole tanker transport, and a combat support element team deployed on the exercise.

Cope North provides a scenario that develops multi-lateral interoperability and coalition procedures in humanitarian assistance and disaster relief, air-power missions, including air superiority, close air support, interdiction, electronic warfare, tactical air mobility and airborne command and control.

Humanitarian assistance, disaster relief exercises and strike mission training were conducted during the first week of Exercise Cope North 2020, while air combat tactics and large-force employment training were the focus of the second week.

This was the 10th time Australia participated in Cope North.

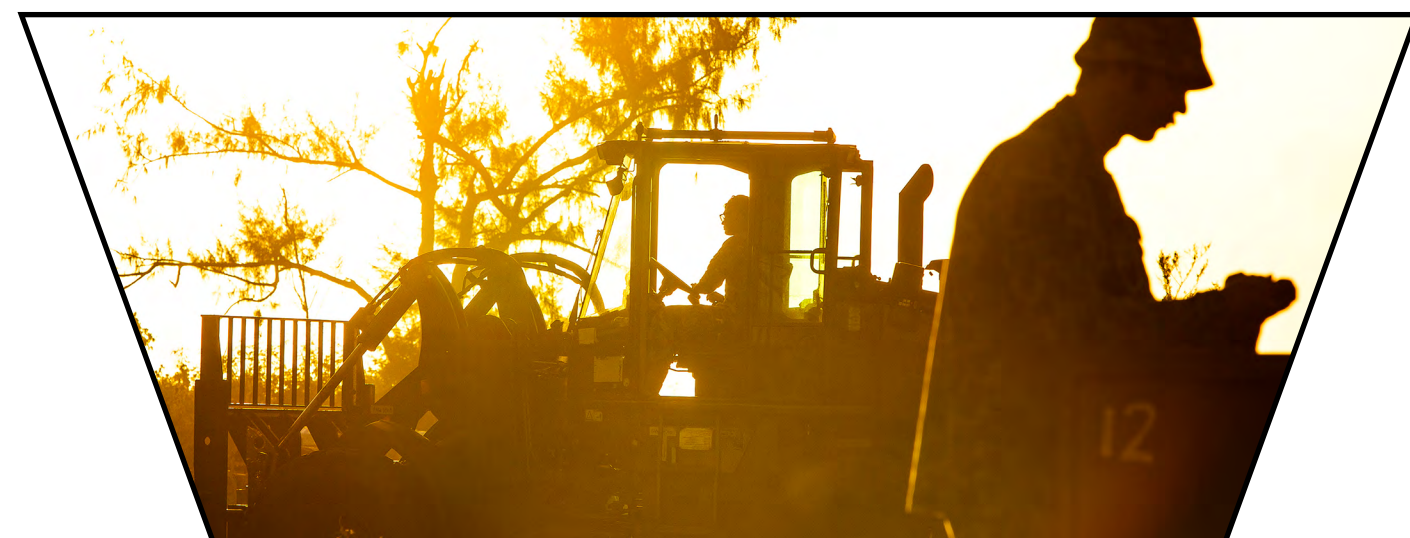


TOP: A special Exercise Cope North 'family' portrait. US Air Force photo by Senior Airman Gracie Lee.

RIGHT: Australian F/A-18A 'classic' Hornets in action. Photos by Corporal David Said.



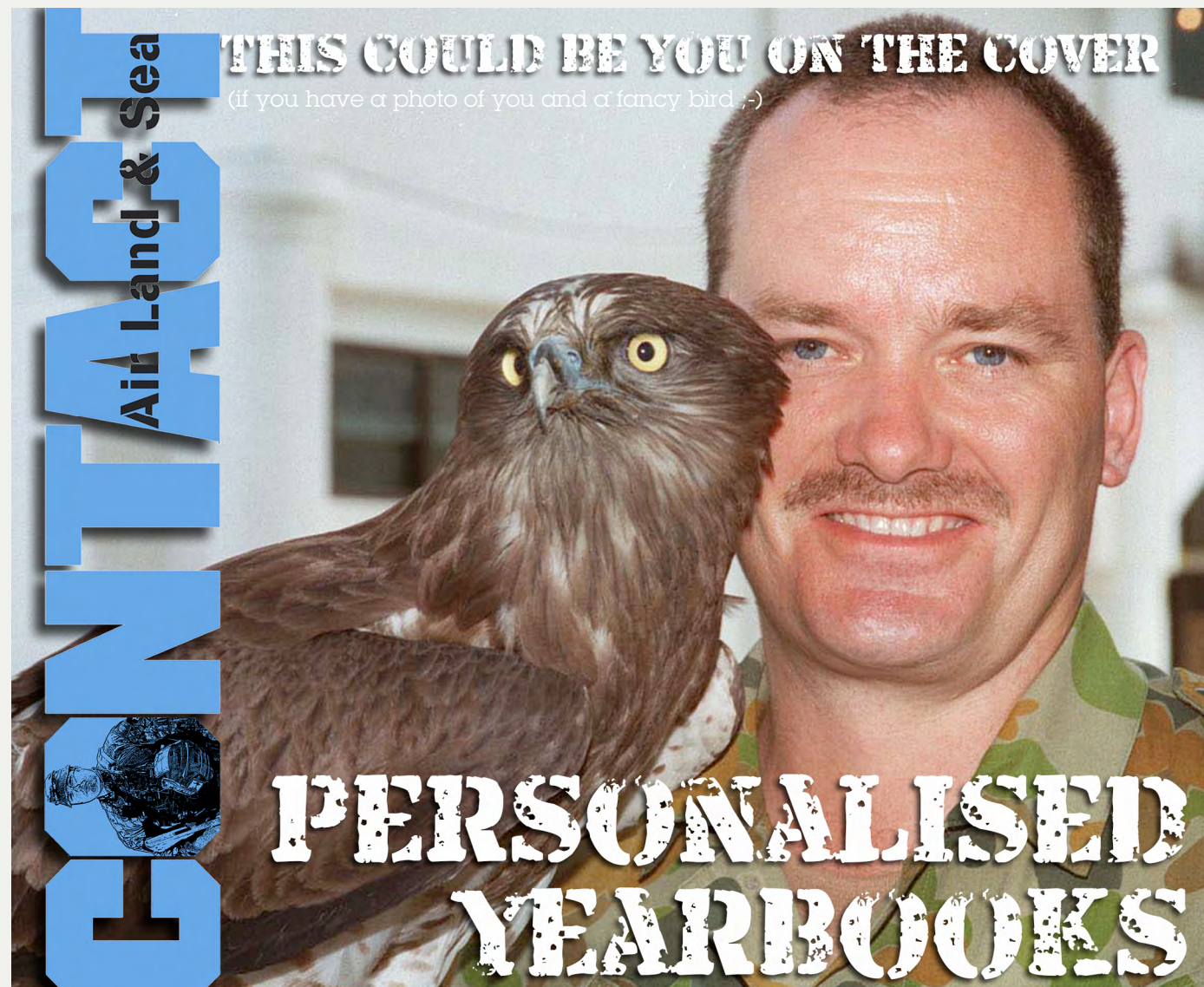
CLOCKWISE FROM TOP: 77 Squadron F/A-18 Hornets taxi on arrival at Andersen Air Force Base for Exercise Cope North 20; No. 4 Squadron Combat Controllers watch a USAF C-130J Hercules lands on Tinian Island during the humanitarian-assistance and disaster-relief component of Cope North; A forklift moves supplies on Tinian Island; Aircraftman Eugene Ramos of No. 381 Squadron helps to erect a tent on Tinian Island; and, No. 2 Expeditionary Health Squadron medical assistant Corporal Megan MacAuslan treats a 'patient' during a humanitarian-assistance training scenario. All photos by Corporal David Said.



CONTACT HARD COVER COFFEE TABLE BOOKS

NOW WITH
FREE CUSTOMISED-COVER UPGRADE

Buy the yearbook as normal, then send us your favourite photo so we can make you (or a friend) the covergirl (or boy) on your very own **CONTACT Yearbook**



2015



2016



2017



2018

ORDER HERE

2019 Yearbook coming soon

All these books can be customised – **FREE**. Simply send us your favourite (high-resolution) photo and we'll put that on the cover of 'your' new CONTACT coffee-table book.

Send photos and/or special headline requests to editor@militarycontact.com



Invictus Games

These are print-on-demand books. Allow up to 30 days for print and delivery after ordering.

CONTACT

DFSW Club

DIRECT FUNDING SUPPORTERS OF OUR WORK

Our most valuable Patreon members

Aaron Bonnett	Waroonra	WA
Raymond Yeow	Sydney	NSW
David Tatler	Ermington	NSW
Warren Stickens	Wentworthville	NSW
George Hulse	St Lucia	QLD
Eric Taylor	Craigmore	SA
Mark James	Leongatha	VIC
Peter Leed	Wy Yung	VIC
Owen Glover	Little River	VIC
Len Thompson	Cotton Tree	QLD
Mike Gillen	Seaford Meadows	SA
Joshua Elmer	Cranbourne	VIC
Noel Wright	Helensvale	VIC
Rod Charman	Mildura	VIC
Dennis Mitchell	Greenleigh	NSW
Mike Ryan	Hawthorn East	VIC
David Read	Regents Park	QLD

There are 12 other Patreon members, whose support is also very, very welcome.

The amazing **CONTACT** fans listed on this page are **Direct Funding Supporters** of our **Work**, financially supporting what we do – not because they have to, but simply because they want to.

With their support, **CONTACT** can continue to deliver what we already deliver – plus a few extra rewards exclusive to **DFSW Club** members.

Unfortunately, the one big reward we wanted to deliver – printing **CONTACT** again – did not happen, because the level of support required just didn't materialise.

Find out how you can join the **DFSW Club**, and all its benefits, at

patreon.com/contactmagazine

PUBLISHING IS A TOUGH GAME

Last issue I told you where **CONTACT** came from and why? I've written a [longer history](#) on our web site – but the gist is that myself and a corporal launched **CONTACT** Magazine as a "fcuk you" to the 'powers that be' for destroying morale at **ARMY** Newspaper and shutting down **ARMY** Magazine, which we all loved working for.

65 issues later, I like to think I showed 'em :-)

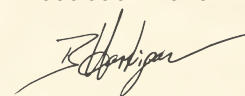
But, it really hasn't been an easy ride. We learnt many (often painful/costly) lessons along the way – like, just how important cover-image choice is.

Issue #1, with the rifle-over-shotgun on the cover, was a really high-selling magazine. We didn't have official figures yet, but we had spies all over the country telling us it was selling like hotcakes wherever they looked.

We got excited and printed twice as many copies of issue 2. But the action-less Navy photo on the cover was a disastrous choice and we sold half as many copies as issue 1, after spending nearly \$30k on a double-sized print run.

That lesson nearly bankrupted us from the get go, but, thankfully, issue 3 (3RAR dude wearing cam cream and beret (in [Archives](#))) saved our bacon – at least for now.

That photo was a classic "don't ask for permission – get forgiveness afterwards". No way Defence would have OK'd a beret over cam cream. But the photographer was imaginative, the subject game and the resulting magazine cover proved very popular with only positive feedback – even from Defence!



Our most appreciated PayPal members

Christopher Kennedy	Brookvale	NSW
Robert Rowland	Yarra Glen	VIC
Ann Hallam	Toowoomba	QLD
Elena Gray	Prahran	VIC
Colleen Crabb	Urangan	VIC
John Winter	Springwood	QLD
Stephen Dale	Blaxland	NSW
Patrick Kavanaugh	Stanwell	QLD
Mark Johnson	St Marys	NSW
William McIver	Sellicks Beach	SA
Luke Norman	Kuraby	QLD
Adrianus Voormeulen	Charlestown	NSW
John van der Pol	Shaller Park	QLD
Neil Hammett	Diamond Creek	VIC
Terry Irons	Unanderra	NSW

PayPal membership is no longer an option

Thank you all very much

for your support



What is DFSW Club?

While DFSW is an Army acronym, we hope our Navy and RAAF fans will forgive us for moulding it to our needs – **Direct Funding Supporters** of our **Work**.

Membership of the DFSW Club is completely voluntary and, while it does have some perks, **CONTACT** would definitely seem to be getting way more out of this relationship than members are – and we hope to redress that imbalance as time goes by. If you have any suggestions in this regard, please sing out.

Joining the DFSW Club can only be done via [Patreon](#), an American platform designed to help fans support 'creatives'. Unfortunately, this means membership is paid in US\$, so the exchange rate can hurt sometimes – especially round about now, it seems. Please do check exchange rates before committing.

We are so grateful to our amazing supporters who joined our DFSW Club in the hope that we would print **CONTACT** again – and gobsmacked that so few of them left after we announced the decision not to proceed with that plan.

We thank all our past and present members most sincerely for your ongoing support – and if you would like to join them, please check out our Patreon page, [here](#).



JUST SOLDIERS

BY MAJOR DARRYL KELLY

Brunswick Boy

LIEUTENANT JOSEPH RUPERT BALFE
6TH BATTALION AIF

As the news of war broke across the Melbourne University campus, students went wild with excitement. Hats in the air, backslapping and jostling were the order of the day as war fever gripped young and old alike.

Rupert Balfe, a quiet unassuming medical student, contemplated his future. He was in the fifth year of his medical studies and had a yen to serve – and serve now. Many, including his father, Matthew, a major in the local militia unit, said it would be over by Christmas. But to wait might very well mean he'd miss out – and Rupert Balfe wasn't missing out on this, not for anything.

Born Joseph Rupert Balfe on 9 March 1890, Rupert, as he preferred to be known, was a bright young lad, who lived with his family in a modest home in Sydney Road, Brunswick¹, just north of Melbourne's city heart. He could hold his own on the sporting field and was both an avid Australian Rules player and keen athlete, but he also held a burning desire to learn. Rupert excelled in studies at the Princess Hill State School and earned a scholarship to attend University High School where he was appointed as School Captain and, when it came time to leave, he chose to continue his higher learning at Melbourne University, with an ambition to be a doctor specialising in surgery.

Young Rupert devoted every waking minute of his time to his studies. But the old adage, "all work and no play..." started to ring true. Being from a military family, he felt it only right to continue the family tradition, so he joined the local unit – the Melbourne University Rifles – quite early in his academic career.

A keen soldier, Rupert was quickly identified as a natural leader. With each annual camp, he stepped up through the non-commissioned ranks² until, on 16 May 1913, he was commissioned as a 2nd lieutenant in the regiment's B Company.

He quickly developed into a competent young officer, who displayed a cool, calm style of leadership. He also enjoyed mess life and the company of fellow officers, many of whom were also students at the university.

One mate stood out from the rest – a dynamic law student by the name of Robert Menzies³.

August 1914, and Rupert could finally see the light at the end of the tunnel. "Finish off this year, then honours and then the sky's the limit," he thought to himself.

But the campus was soon awash with news of the war, and Rupert grappled with a difficult decision – wait and finish his studies or do his duty now and enlist?

In his own mind, the decision was simple. He already held a King's commission and he knew that every trained officer would be needed to help whip this new army of Australia into shape.

With that, 2Lt Joseph Rupert Balfe enlisted in the Australian Imperial Force. He was allocated to the 6th Battalion of the 2nd Infantry Brigade. The 6th was made up of volunteers from the Melbourne suburbs.

Lieutenant Joseph Rupert Balfe,
6th Battalion AIF.

*Photo AWM H05654 courtesy of
the Australian War Memorial*



Rupert marched with the brigade's recruits to the Broadmeadows Training Camp just outside the city, where he was assigned Platoon Commander – Number 1 Platoon – A Company¹.

Rupert soon set about getting to know the men. He was quiet and confident when he spoke to them for the first time. He laid down simple rules as to what he expected of each man and, in turn, what they could expect from him as their commander. This mutual respect was to hold them in good stead through the ensuing months.

Although the camp was ill-equipped to receive these early recruits, training went on according to schedule. Drill, exercises, weapons and bayonet fighting were the order of the day.

Balfe was always there to help coax the men along. He was critically concerned as to their welfare and openly sought to see that their lines, uniforms and bearing were up to the mark.

The 6th Battalion soon developed into an efficient, well-trained organisation. They were well summed up by the battalion's second in command Major H Gordon Bennett when he said, "Suddenly we have ceased to be a group of individuals and become the 6th Battalion⁴".

The 6th Battalion entrained for Melbourne, for the time had now come to sail. Two battalions, the 6th and 7th, boarded the troopship Hororata⁵.

On 19 October 1914, the Hororata weighed anchor and set sail.

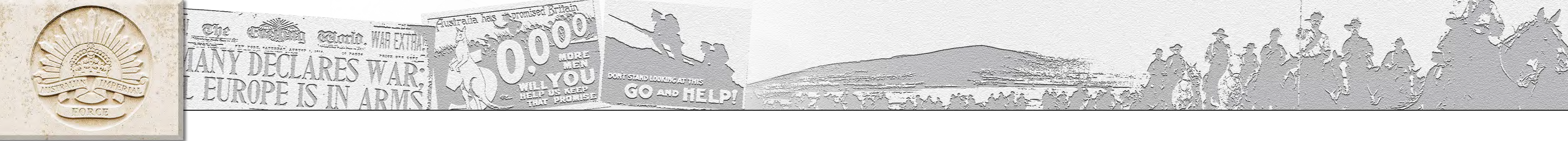
There was a brief pause at the Western Australian port of Albany, where Hororata joined other ships from Australia and New Zealand, as part of the first troop convoy to sail to war.

On 3 November, as the convoy sailed across the vastness of the Indian Ocean, they received news that would have a significant influence on their future – Turkey had entered the war on the side of Germany.

Further excitement was experienced on 9 November when the convoy erupted with news that one of their escorting cruisers, HMAS Sydney, had sailed off to answer an SOS message from the Cocos Islands telegraph station – followed hours later by news that she had engaged and sunk the German raider Emden, which was intent on destroying the vital communication link⁶.

In mid-November the convoy reached Colombo and, just before the end of the month, the Australians and their New Zealand brothers learnt they were not bound for cold, wet England but instead were to be offloaded in Egypt, to finish their training and be on hand to strengthen the defences of Suez Canal, if needed⁶.

As the troops disembarked in early December, it was a godsend to be back on dry land in lieu



of a pitching deck. The majority of the battalion marched to Mena Camp at the foot of the mighty Pyramids. It was here they were to hone themselves for the fight to come.

Rupert Balfe, now a lieutenant, relished the hardness and severity of the training. The sights and sounds of this new yet ancient land, coupled with the sweat and tired muscles, readied him for the future.

Early April 1915 and the sense of an impending move spread throughout the camp. The 1st Brigade departed for the seaside port of Alexandria on the 3rd. The 2nd Brigade followed the next day. The 6th Battalion boarded the troopship Galeka and learnt they were again to share their ship with their sister battalion⁷ the 7th.

Galeka sailed to the Greek island of Lemnos on 8 April, where a mighty armada assembled for the impending campaign. They were part of an amphibious force destined for the shores of the Dardanelles and a place that would be forever known in Australian history as – Gallipoli.

As they set sail on the morning of 24 April, they knew little of the plan. The officers were assembled that night and orders were given for the assault. The 3rd Brigade was given the honour of being the first in. The 6th Battalion was to land, drop packs and await further orders as the situation developed.

Balfe briefed his men. He was proud of them and they in turn were proud of him. In the pre-dawn darkness the men of the 6th Battalion hovered below decks, where they waited for the order to move up and board the landing boats that would take them to shore. Balfe looked at his watch as their appointed time to disembark came and went.

"What is going on?" he thought to himself.

They could hear movement as the men of the 7th climbed over the railings and down the rope ladders to the boats below. The 6th finally received the order to move up on deck. Rupert scanned the situation. The Galeka seemed to be a lot closer to the beach than he expected.

Turkish fire was directed towards the Galeka. Shells splashed around them as machine-gun rounds ricocheted off the hull and whistled overhead.

Finally, the order came down – "Over the side lads!" – and now it was their turn to get ashore and have a go!

As they rowed, the shrapnel shells rained down upon them. Some were hit in the boats, some as they disembarked. They were still some yards from the beach when they got the order to jump over the side. They were in waist-deep water in full kit. Men disappeared under the surface, the spreading red discolouration of the water telling of their fate.

Suddenly they were on the beach. "Move to the base of the cliff – Move to the base of the cliff", the officers and sergeants ordered. As they huddled next to the rocky inclines they glanced skyward. The cliffs were well over 100 feet high and it was nearly straight up.

"Fix Bayonets!" the order rippled down the line.

Balfe looked around the beach. The terrain bore no resemblance to the briefings he received and the mix-match of troops on the narrow beach seemed chaotic.

The 6th were quickly moved into a large re-entrant later to be called Shrapnel Gully. Packs were dropped and the companies regrouped and sorted themselves out as best they could.

Then they were off – Balfe led his platoon up a narrow crevice in the hillside. Many were hit as they moved up, tumbling down upon those who followed.

God knows how they did it, but they made it to the top eventually.

The battalion advanced in a loose broken formation. Companies struggled to maintain contact with those on their left and right. They moved up and down the scrubby gullies being sniped at by the concealed Turks and rained down upon by shrapnel shells. But still they fought on throughout the remainder of the day.

NOTES:

- 1 National Archives of Australia: B2445, WWI Service Records, Joseph Rupert Balfe
- 2 www.aif.adfa.edu.au – Joseph Rupert Balfe
- 3 Later Sir Robert Menzies (1894-1978) – Prime Minister of Australia 1939-1941 and 1949-1966
- 4 Later Lieutenant General Henry Gordon Bennett, CB, CMG, DSO, VD. Despite highly decorated achievements during World War I, during which he commanded at both battalion and brigade level and went on to become the youngest general in the Australian Army, Bennett is best remembered for his role in the Battle of Singapore in February 1942. As

- commander of the 8th Australian Division, he escaped while his men became prisoners of the Imperial Japanese Army.
- 5 AWM 8, Unit Embarkation Rolls, 6th Battalion, 1914-1918 War
- 6 Australia's Military History for Dummies, Dr David Horner, 2010
- 7 Rough as Bags, The History of the 6th Battalion, 1st AIF, 1914-1919, Ron Austin, 1992
- 8 Official History of Australia in the War of 1914-18, Vol 1, page 421
- 9 Fallen – The Ultimate Heroes, Footballers who never returned from war. Jim Main and David Allen, 2002

Lieutenant Rupert Balfe led what remained of his men up onto a feature known as Pine Ridge. He pushed on further and occupied a small mound in an area later to be called Legge Valley. It was there he was able to stop and finally make an appraisal of the situation. He knew he had some of the battalion on the crest behind him. He knew nothing of what was to his right or left, but he was sure of one thing – the Turks were certainly to his front and possibly manoeuvring to encircle his small, beleaguered group.

It can only be surmised as to what happened next.

It was only a couple of hours until last light, when movement was detected on Balfe's flank "Mr Balfe – something's moving over here," one soldier said. "Sir – they're over here too!" another yelled. Balfe looked around, there were five of them against God-knows how many? Suddenly, they heard a firefight erupt behind them. The men on top of the ridge were being engaged.

The movement around Balfe's position increased. Then there were Turks attacking from all sides. "Right lads, get stuck into them," he screamed.

In 1919, following the cessation of hostilities, a special ANZAC mission headed up by the official historian C.E.W. Bean, returned to Gallipoli.

They scoured the battlefield, searching for relics, organising the locations of war cemeteries and piecing together further accounts of the 1915 campaign.

As they moved down into Legge Valley they came across five skeletons, still lying where they fell, in a small semi circle facing outward. The tattered remains of their uniforms still bore the remnants of their purple and red colour patches – the patch of the 6th Battalion.

Bean wrote: "The men who held the line of Pine Ridge were not the sort that would give the enemy a chance to wreak his vengeance on their bodies while they lived. They died where they fought... One group of five lay in a semi circle close above the open grass of Legge Valley, on a mound which they had defended... They needed no epitaph. It was enough that they lay on Pine Ridge⁸.

Members of the 6th Battalion who survived the war were of the common belief that the skeletons were that of Rupert Balfe and his small yet gallant band of men, who were last seen advancing on the right flank.⁷

His mate, Robert Menzies, was deeply moved by the loss of his friend and penned this heartfelt poem⁹:

*His was a call that came from far away;
An Empire's message flashing o'er the seas.
The call to arms! The blood of chivalry
Pulsed quicker in his veins; he could not stay.
Let others wait; for him the glorious day
Of tyrants tumbled and a world set free
Had dawned in clouds of thunder; with a glee
Born not of insensate madness for the fray,
But rather of a spirit noble, brave
And kindled by a heart that wept at wrong.
He went. The storms of battle round him rave,
And screaming fury o'er him chants its song.
Sleep gallant soul! Though gone thy living breath,
Thou liv'st for aye. For thou has conquered death.*

Lest We Forget

IF YOU ENJOYED THIS FREE E-MAGAZINE PLEASE

TELL YOUR

FRIENDS

TO SUBSCRIBE FREE VIA

AUSSIECOMBAT.COM

... AND WE'LL SEND THEM THESE
TWO FREE VIEWEE TWOOE-SIZED ADF
WEAPONS GUIDES BY RETURN EMAIL



If you haven't got a copy of both our free viewee-twoee-sized "Weapons of the ADF" printable .pdfs yet, you can download them free from – www.contactairlandandsea.com/2016/02/03/viewee-twoee/

AIR LAND & SEA

THE AUSTRALIAN MILITARY MAGAZINE



OR GIFT FOR CHRISTMAS



MAIL INCLUDED



HELP FOR THE TACTICALLY JADED

Are you tactically jaded from copping pineapples on a day-to-day basis, going on bulk field exercises up the wazoo, or missed *ANOTHER* blood trip?

Well, pick your morale up off the Q Store floor and get yourself into one (or a drawer full) of these head-turning, morale-inflating TJ Vikings.

With a battle-hardened face and a TJ on his battle axes, this T is sure to turn some heads.

This RSM-frightening shirt is available in a range of sizes, is Jaded compliant and made from a quality blend of 60 per cent cotton, 40 per cent polyester – and, like all Tactically Jaded shirts, only used Australian suppliers, to help support its Aussie roots.

Featuring a wider cut and longer body length, the TJ Viking has a comfortable fit.

It's also fabric pre-shrunk to minimise that annoying shrinkage that can really make you tactically jaded.

Available from the [Tactically Jaded web site](http://TacticallyJaded.com.au) or email admin@tacticallyjaded.com.au



BECOME INVISIBLE WITH SOTACS

Highly trained snipers and special operators are invaluable resources.

Saab's SOTACS – Special Operations Tactical Suit – provides such operators with a camouflage system that allows stealth operations in the most hostile environments.

The suit is lightweight and customisable. It also suppresses ultraviolet, visible, near infrared,

thermal infrared and radar signatures and offers exceptional cover from a wide range of counter-reconnaissance systems.

The multispectral camouflage properties of the SOTACS significantly reduce the risk of detection, allowing the soldier to focus completely on the task.

Learn more [here](#).

PHANTOMLEAF WASP II

German camouflage experts Phantomleaf, have release their new Wasp II pattern, which is specifically designed for civilian use.

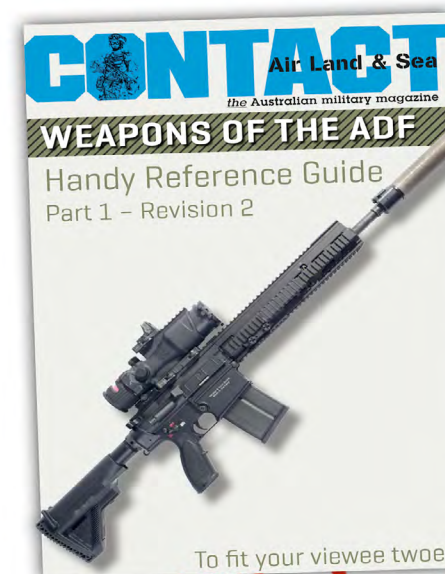
Already proving popular in Europe and South America, Wasp uniform components are made in comfortable 20/80 poly/cotton rip-stop by German military clothing manufacturer Leo Kohler and are available in three patterns.

Z2 pattern for semi-arid, Z3a for temperate and jungle, and Z4 for urban areas.

Wasp II patterns use Phantomleaf's expertise in the physiological effects of disruption to achieve outstanding concealment that is in demand by hunters and mil-sim enthusiasts everywhere.

Distributed exclusively in Australia by Premier Defence Agencies Pty Ltd.

www.premierdefence.com.au or phone 02 9708 2475



Order your next Viewee Twoee – pre-loaded –



...by CONTACT

THAT BIG QUESTION



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

If you recall the [previous article](#), our three prime vendors should be getting ready to battle it out for the title of lead agency to procure sniper systems and other associated items under the first tranche of Project LAND 159. We'll wait and see who takes the lead in this part of the project.

The next part of L159 is likely to be what interests you the most – and that is the replacement of the F88 Austeyr family of rifles, F89 Minimi and MAG 58.

I can see a number of you sitting in front of your screens, finger crossed, chanting M4, M4!

You sure about that? To be fair, Eugene Stoner's operating system designs are used in most modern military rifles and those systems are derived from the AR10, AR15 and AR18. Even Heckler & Koch have adopted their versions of the design, in the HK416/417 (AR15 and AR10 respectively) and the G36 which is the AR18, developed after getting the remediation contract for the British L85, which is also an AR18 operating system.

To a point, the F/EF88 uses the AR multi-lug rotating bolt system. To really be pedantic, that system came from the 1930's US Johnson rifle and Eugene improved it – hooked it up to a semi-gas impingement system. Yes, the AR/M rifle gas system is not a truly direct gas impingement system.

So, given all that detail, what we get may be based on one of these operating systems, but not necessarily an M4.

Still, the M4 is a proven, flexible and inexpensive system to procure these days – unless you want a really good version. But operating system is one of the lesser considerations, as factors such as accuracy, reliability, functionality and ammunition type are more important.

In fact, ammunition type is the biggest question. Will we stay with 5.56x45 NATO? There are a number of new calibres being looked at by other nations, mostly in the 6.5 and 6.8mm projectile diameter, with various projectile weights. Different case variations notwithstanding, it is the ballistic performance, with an emphasis on the terminal performance that is in play here.

The second question for ammunition is more of a logistics consideration, in that – can we manufacture it here?

If it's a traditional brass case it shouldn't be a problem, but what if it's a polymer case, or one of the new polymer-cased, telescoping cartridge types? Can we do that here? What will it cost to set up? And, do we have the raw materials and plant to manufacture the polymers if we become isolated in a time of war?

Right now, we only manufacture 5.56 F1 ball ammunition types, offer to make F4 7.62 ammunition, which rumour has it, is made from imported components now*, and we don't do 9x19mm ball ammo at all any more.

We do import a hell of a lot of ammunition for the ADF. Not to mention that there are some issues still with polymer case ammunition.

As far as terminal ballistics go, what is the advantage of getting a larger, heavier bullet if the affect at the target is not much more than the current ammunition? Not much really, and not worth the hassle if it has to come in the form of a new manufacturing plant to make it.

The new ammunition we seek must have a significant advantage over the current ammunition in performance, both ballistic and incapacitation – as well as weight and space consumed in load carriage.

As you may be gathering, the ammunition really should come first, then the delivery system. After all, that's what a rifle is, just a delivery system for little tubes of combination metals.

But there's a problem with the idea of choosing a new ammunition and using a prime vendor to offer you a complete system. You will get the rifle they offer for that ammunition. What if you like the ammo, but the rifle sucks? Or the rifle you like can't take the ammo you like? What if the rifle and ammunition package is a mediocre system but still best combination you can get? It starts to sound like so many of our troubled acquisition projects that were cancelled, or not what they should have been because the components of the system wouldn't integrate, or the offers were so poor we had to choose the best of the worst.

Maybe they will integrate, but after throwing a half-billion or more of unplanned extra dollars at the manufacturer, waiting a couple of years past the scheduled in-service date and doing a full refurbishment of the still-serving EF88s to fill the capability gap? I'd like to think that couldn't happen in a large acquisition – again.

But history says...!

That rifle and ammunition package also includes sighting systems and other accessories, in the hope that a complete 'system in a box' can be obtained from a single supplier, making logistics, support and management so much easier. Or so it's hoped.

But individual contractors can perform better when they only have to deal with their products and the better management comes down to the Systems Project Office doing its part, and being staffed and funded properly to achieve that.

Often, governments feel that transferring some of their workload onto the supplier looks better on the budget. After all, even if it costs more, that money comes from another cost centre that's not in their reporting portfolio and looks good to the director and bean counters. Put simply, if the choke point is a single source supplier to save money, the whole system is in trouble, not just one or two components of it, which can potentially be replaced by another manufacturer.

But this still doesn't tell you what rifle we're getting – and to be honest, no one knows anything except the rifle they want. And that is the rifle most of you are thinking about right now.

But defence can't say that, because this will be an open acquisition program with years of testing and political and personal interference on many levels.

But that can't happen, you say!

State and federal members for places such as Lithgow and Benalla will fight for their constituents and demand they be employed by the new contractor. Politicians

without established manufacturers will add pressure to secure a share of the pie for their state and now you may be getting a picture of what is to come.

International efforts to update infantry weapon systems will also have an affect on the results, as Defence will be watching closely and hoping to get access to some of the data created by others.

So, I have basically spent this whole article telling you nothing and explaining why I've told you nothing – although I do have a very good idea of what the end users actually want.

If you want to try and work it out for yourself, here are your parameters:

- Is it more lethal and functional than what we have now?
- Do we have the capability and resources to manufacture rifle and ammo here?
- Is it proven, new or emerging technology?
- What will it cost to buy and sustain?

The answers will take several years.



**Thales, feel free to jump in and correct us!*

Private Anthony Brown fires an EF88 at Taji Military Complex, Iraq.
Photo by Able Seaman Chris Beerens.

BOMBING OF DARWIN COMMEMORATION

Members of the Australian Defence Force joined civilians and special guests in Darwin on 19 February to commemorate the 78th anniversary of the Bombing of Darwin and sinking of USS Peary.

Successive ceremonies were held at the USS Peary memorial gun and Darwin Cenotaph to remember more than 200 Australian and Allied men and women who died in the bombing.

The air raid was the first of more than 100 on northern Australia from 19 February 1942 until 12 November 1943 and remains the largest single attack by a foreign nation on Australia.

During the commemorations, soldiers from the 8th/12th Regiment, Royal Australian Artillery, [main photo] re-enacted the response from the coast with a gunfire simulation from M2A2 105mm Howitzers.

HMAS Maitland represented the Royal Australian Navy off shore while the RAAF conducting a flypast with two F/A-18A Hornets from No. 75 Squadron based at RAAF Base Tindal.

Film strip from top: Gun-position officer Lieutenant Jonathon Kale of 102 Coral Battery, shouts orders to the gun detachments: Private Alexander Norgrove, 8th/12th Regiment, in period costume: Private Georgina Heard, NORFORCE, in the Catafalque Party: and, Able Seaman Elijah Dau, HMAS Coonawarra, in the Catafalque Party.





GERBER

DOWNRANGE TOMAHAWK

Breaching Tool

AVAILABLE AT



PLATATAC