







ROYAL AUSTRALIAN ENGINEERS

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- establishment and upgrade of RAE Memorials
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- RMC graduation prize

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Cover

SPR from 3 CER conducting a route search with their EDD

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MESSAGE FROM THE HEAD OF CORPS

Royal Australian Engineers
Brigadier Michael Say, DSC

Welcome to the 2022 edition of Australian Sapper

In my first year as Head of Corps it is a significant honour to be able to write this message as part of the Sapper magazine. 2022 has been another busy year and one that will be remembered for a number of significant events and further achievements of the Corps as we continue to punch above our weight.

Our heritage has been at the forefront. This includes the celebration of 120 years since various colonial units merged as one engineer team, under the authority of our Commonwealth constitution. A ceremony was undertaken on the

1st July at the School of Military Engineering. This was supported by Sapper Week, undertaken from the 31st October to 4th November which included the Corps Conference, a Section competition and a number of other activities to celebrate and reflect on our history. I was also able to attend the 30th Birthday parade at 3 CER – a fitting activity for a unit which has been at the forefront of so many exercises and operations, both domestically and overseas.

2022 also saw the passing of Her Majesty, Queen Elizabeth II, who was the Colonel-in-Chief for the Corps. I was extremely privileged, humbled and honoured to lead a group of five Sappers as part of the ADF contingent which travelled to London. This included attending the State Funeral in Westminster Abbey and taking part in the funeral procession from the Abbey to Wellington Arch. The experience reinforced the special relationship Her Majesty had with the Corps - she truly was a remarkable lady who provided us all with an example of service and sacrifice.

The articles in the magazine highlight the contribution the Corps continues to make within Army, the ADF and the community. I will take the opportunity to reflect on the achievements of our people across the Total Workforce – they have and continue to be significant. Our relevance and the demand for sappers remains strong within Army and across the Joint Force. This has been evident through extensive involvement in domestic operations with Sappers providing force elements within Operation COVID ASSIST and AGED CARE ASSIST. While we were not deployed in our core role, our sappers performed their task with professionalism and enhanced our reputation as a can-do Corps. This was further reinforced throughout Operation FLOOD ASSIST where our Regular and Reserve units were central to the ADF response. Throughout NSW and South East Queensland our people were able to provide much needed support to the community. I received nothing but high praise from the chain of command, emergency services, all levels of government and the community. Our Sappers once again demonstrated their utility, professionalism and most importantly, empathy and humility.

Through OPERATION TONGA ASSIST, the Kabul crisis and security cooperation exercises and exchanges with the Philippines, Indonesia, Timor-Leste, Fiji, Papua New Guinea and the US, Sappers continue to play a central role within our region and contribute to the strategic objective to SHAPE Australia's strategic environment. In the Pacific, our works and construction engineers are deeply involved in multi-billion dollar whole-of-government projects as valuable contributors to the Governments South West Pacific Step Up. Our continued support to the Army Aboriginal Community Assistance Programme, which celebrated its 25th year, has been remarkable, with our men and women enduring hardship in austere environments and changing people's lives for the better through sheer determination and technical skills.

All this work has been extremely important. But so too is further testing our foundation warfighting skills to be ready for the next challenge. These skills have felt the impact of a number of years supporting domestic operations and COVID restrictions. We need to fight to train and ensure we focus on development of the professional mastery of our junior NCOs and officers. Our School remains at the centre-piece of the Corps to support this important work.

The Corps has benefitted from a number of capability enhancements in recent years; however, we must ensure we are postured for the future. Well done to the team at CATC who did a mountain of work to progress our trades through ECRM. We have also seen investment in force structures with the re-establishment of 12 CE Works at Enoggera and the establishment of 13 Engineer Regiment in Perth. We now face the challenge of growing the people to fill these positions to truly deliver additional capability. This will require us to explore alternative ways to recruit and train across the total workforce. Major platforms such as Armoured engineering being delivered within L8160 will lead to opportunities; however, will require the Corps to think differently about how we structure, train and provide support within a combined arms team. This is more than just adopting a new platform and is one of the biggest challenges the Corps has faced. The Corps will undertake an Establishment Review in 2023 which I believe will require us all to fundamentally review how we best support Army and the Joint Force. This will obviously be informed by the outcomes of the Strategic Defence Review. As we approach this important work, I ask that you keep an open mind with a focus on the future. While we will be informed by history, we will need to identify legacy capabilities that are no longer fit for purpose or irrelevant and prioritise capabilities to meet future challenges. Our people remain the centre of gravity and make the Corps. This is supported by our community and history - essential in enabling our people to perform their role both at home and overseas. Our RAE teams continue to identify additional opportunities to build on the excellent foundation we have as a Corps contributing to Army in the community.

Promoting and enabling our Sapper Associations and the RAE Foundation are crucial in supporting our people. Once a Sapper, you are always a Sapper and I encourage Sappers to join an Association well before they leave the Army as it provides a connection to support camaraderie and interaction across the Corps outside of our units.

In closing, each of you can take great pride in the role you have taken to contribute to Army and the Joint Force up to this point; however much work is yet to be done on how sappers can contribute to the challenges of the future. I therefore ask each one of you to identify opportunities where you can make a difference and ensure the Corps is well positioned for the future. Serving as a Sapper in the Australian Army is a great honour. Thank you for what you do.

F	ol	low	the	Sap	per.

Ubique.



MESSAGE FROM THE CORPS REGIMENTAL SERGEANT MAJOR

Royal Australian Engineers WO1 Matthew Dickson

In January I was honoured to take up the position of RAE Corps RSM. Much of my focus this year was commencing the implementation of the RAE trade restructure. A significant undertaking as RAE reduced overall soldier ECNs from 12 to 9. This implementation will continue into 2023 and beyond as we aim to complete the process by November 2025.

While an instantaneous resolution would be preferable, the complexity and volume of changes required qualifications, implementing new training continuums and the alignment of SERCAT 5 and 7 capabilities, requires a measured and steady

approach. For those who have not reviewed the ADELE information pack, I urge you to do so via the link below.

Additional to the work required in 2023, RAE will continue work on a number of further changes to processes and training including the alignment of training with the Land Combat College and common training continuums, while undertaking a Corps wide capability review. These changes have the likelihood of impacting RAE unit structures and Corps capabilities for many years to come. I will be seeking your input into these programs as RAE continues to evolve.

To those recognised in Australia Day or Queens Birthday Honours List, recipients of Service/Corps/Unit Commendations, as well as Awards and to the Steele Cup Winning Team, congratulations. Your recognition is a well-earned reward for hard work, diligence and service to the RAE.

I would like to congratulate all the Soldiers, NCOs and Officers who have recently promoted this year and those promoting in January 2023. I hope you look forward to the responsibilities and challenges that your new positions will bring. To all Sappers that have retired or discharged in 2022, I wish you all the best for the future and sincerely hope you can look back on your military career with good memories.

To all Sappers, thank you for your service. It is a privilege to serve with you all. Please have a great Christmas and a happy New Year. See you in 2023.

The RAE Soldier Employment Categories - Renaming, Restructure and Remuneration 2022 information Portal.

To access the Portal log on to your ADELE by scanning the QR Code and search for 'RAE

Restructure'. Enrol in the course using enrolment key: UBIQUE2022



NEW COMBAT ENGINEER CAPABILITY - LAND 8160 PHASE 1 UPDATE

SO1 Armoured Engineer- LTCOL Neil Bennett (LTCOL Sam Padman from Jan 23) SO2 Armoured Engineer- MAJ Tom Close (MAJ Kieran Galea from Jan 23)



M1150 Assault Breacher Vehicle (ABV) with Full-Width Mine Plough (raised position).

Land 8160-1 will introduce into service Combat Engineering Vehicles to provide the ADF with an under-armour bridging, breaching and engineering capability to address a current capability gap for Army. Alongside Land 907-2, Land 8160-1 makes up the Heavy Armoured Capability System within the Combined Arms Fighting System. The desired engineering effect will be achieved through capabilities delivered by the M1150 Armoured Breacher Vehicle (ABV) and the M1110 Joint Assault Bridge (JAB).

With Second Pass approval by Government achieved in December 2021, the capability is now in 'acquisition' and will deliver an initial operational capability by the end of 2025. The projects will significantly enhance how the Royal Australian Engineers (RAE) support close combat operations, enabling rapid obstacle reduction and clearance in the direct fire zone, under the protection of armour.

The projects will acquire 29 M1150 Assault Breacher Vehicles (ABV) and 17 M1110 Joint Assault Bridges (JAB). An Armoured Engineer Troop (Armd Engr Tp) will support a Combat Brigade, each Armd Engr Tp consisting of 6 ABVs and 3 JABs. In addition, Land 8160-1 will acquire a further 6 M88A2 Armoured Recovery Vehicles (ARV) to support the increase in heavy armoured vehicle numbers within the Bde, 1 ARV per Armd Engr Tp plus a regional reserve. A training fleet of 4 ABVs and 2 JABs will support training at Puckapunyal, with all other platforms allocated to regional and national reserve pools. Both the ABV and JAB have a crew of two, a Driver and Commander / Operator. To support introduction into service and sustainment training, 6 RAE instructor positions will come on line within Driving and Servicing Wing at the School of Armour, along with an additional 6 RAE crew positions within B Sqn 3/4 Cav, from 2024.

The ABV can be fitted with a number of front-end equipment to achieve the desired engineering effects to support mobility and limited counter mobility and survivability tasks. The primary attachments are the Full-Width Mine Plough, Combat Dozer Blade and an Excavator Manipulator Arm. Other mission configurable attachments include a Magnetic Signature Duplicator, Proofing Roller and Surface Clearance Device. Additionally, as the ABV moves through an obstacle, its integrated lane marking system can identify the limits of the cleared lane. Both the JAB and ABV utilise the existing M1 Abrams hull; with the ABV



M1150 Assault Breacher Vehicle Front End Equipment from Pearsons Engineering Limited

being equipped with a 12.7mm remotely operated weapon (for self-protection) as well as two rocket deployed Mine Clearing Line Charges (MICLIC). Each MICLIC is able to reduce up to 100m depth of a minefield, although ploughing is still required to achieve a 'cleared lane'. The JAB will have a new hydraulic bridge launching system that is capable of emplacing a bridge in under four minutes, in close combat conditions. The JAB is able to span gaps of up to 18 meters to enable the mobility of the Joint Land Force and can recover the bridge from either end.



Aurecon/AECOM - ADF Armoured Fighting Vehicle Facilities Concept

With vehicles due to enter service within a few short years, progress towards production is positive and remains on schedule to deliver on time and in budget. With the RAE committed to support the introduction into service of this new capability within 9 Bde, resources and personnel are now being aligned in Adelaide from 2024, in order to prepare for, receive and operate this new capability. Aurecon, in joint

venture with AECOM, is leading design services for the program over three proposed stages, within a 12-year schedule. The new facilities at Puckapunyal Military Area, Lavarack Barracks and Edinburgh Defence Precinct will support the first stage of a broader facilities program as part of LAND400, LAND907 Phase 2 and LAND8160 Phase 1.

DIRECTORATE OF OFFICER CAREER MANAGEMENT - ARMY

LT- MAJ Portfolio

MAJ Taylor Luxford-Sanderson

Firstly, I would like to thank the officers within the Foundation Group for their engagement, open and honest feedback, and professionalism throughout 2022. Members of the Corps are committed and well represented within all major HQs, units and training establishments in Army and the Joint Staff. We have continued to provide excellent representation in a number of overseas postings, deployments and executive level support to some of Army's senior officers, which will be maintained throughout 2024. Remote engagement will continue for CMC24 and we will continue to be enhanced through Town Hall and flexible engagement with chain of command support. The enduring intent of remote engagement is to maximise the timely and tailored career mentoring and advice before critical milestones, whilst also providing more structured feedback after the conduct of selection and promotion boards.

Secondly, our Corps is in a healthy position in terms of asset and liability in comparison to most other Corps. Our vacancies are held at the rank of CAPT and MAJ, which has resulted in units not receiving their full complement of RAE Officers. Additionally, more focused effort has been placed on ensuring our officers with specific qualifications are employed in units to best use their skills and experience whilst also ensuring individual development. This has enabled a more focused delivery of capability to Army and the Joint Force whilst ensuring our members are engaged and supported.

Thirdly, 2022 saw a healthy intake of junior officers, including recently graduated general service officers, specialist service officers, lateral transfers, Corps transfers and SERCAT 5 transfers. I would like to take this opportunity to welcome them all to the Corps and wish you all the very best in your new careers. I encourage all members of the corps to continue to communicate RAE opportunities with your peers of all Corps, SERCATs and with non-Defence members who have qualifications which can be of benefit to RAE. The All Corps Officer Employment Specification and the RAE Manual of Army Employment provides a start point for further information regarding RAE Officers.

Finally, the Corps is a flexible and highly skilled workforce with highly qualified combat engineers, civil engineers, project managers, science officers, Special Forces officers and Specialist Service Officers. All of you have an important role to play in providing capability to our Defence Force. The Corps will continue to be challenged and we will be called upon to conduct our duties throughout the full spectrum of operations. Your efforts are thoroughly appreciated across all ranks and you are very well respected across all Corps. I encourage all Foundation Group officers to maintain your drive for career success and be open and honest with your intentions. Be prepared to receive feedback, keep the Career Advisor and your chain of command informed and maintain your professionalism.

Thank you to all members of the Corps for making my transition into the Career Manager role smooth and professionally rewarding. I wish you and your families all the best for the year ahead and I look forward to working with you again in 2023.

SOLDIER CAREER MANAGEMENT AGENCY - RAE

WO2 Portfolio

Career Manager: CAPT Maddison Thomson (WEF Jan 23 – Jan 25)

Firstly, I would like to take this opportunity to thank all Sappers within the Corps for their continued patience and flexibility with the RAE Career Manager team as they continued to manage Career Management Cycles remotely in 2022. CMC24 should see primarily remote engagement, however, this will be supported by additional information and updates to the CMA homepage, regular updates via email and unit visits to understand priorities for the CMC.

I would also like to take this opportunity to thank all unit Command Teams for their ongoing support and dedication to manage the future of our critical capability – our Sappers.

As a quick overview for CMC24, the CMC is broken down into four distinct phases:

Phase 1 – Engagement – this phases commenced in October 2022 with Career Guidance Interviews and Career Management Board Preparation for CMC24.

Phase 2 – Preparation – this phase occurs between January and April 2023, and will see the conduct of the Career Management Board Series inclusive of Command Team Engagement.

Phase 3 – Selections – this phase is a busy time for the RAE CM team as competitive selections occur and the initial posting plot is drafted in preparation for 1st round posting from July.

Phase 4 – Posting – this phase will allow you the opportunity to review, discuss and understand your posting order for 2024. Repechage and 2nd round postings will be complete NLT September 2023 for CMC25 engagement to commence shortly after in October. Guidance regarding the CMC and key dates can be found on the CM-A SharePoint page.

What can you do to help us manage YOUR career? It is important that you use the tools provided to you to best understand your posting opportunities and posting requirements. Visit the CM-A SharePoint page and familiarise yourself with the CMC and key dates, review the gazette and any or all quick reference guides that may be useful (Transfer & Transition, Posting, Promotions etc). Ensure your PARs are submitted in a timely manner and use the Soldier Career Planning Tool. Engage with your Career Manager regularly and raise any issues or concerns early on to enable us to best support you.

As of February 2023, I will be on Maternity Leave and all WO2 Portfolios will be managed by WO1 William Lynch (Combat Trades) and WO1 Golborn Turner (Construction Trades).

Lastly, the RAE CM team would like to congratulate all those members who promoted within the Corps in CMC23 and those we seek to promote in CMC24. Your promotion formally recognises your outstanding achievements and ongoing success. Well done!

Combat Trades - ECN 096, 432 and 141

Career Manager: WO1 William Lynch (Bill) (WEF Jan 23 – Jan 25)

After a very busy year, WO1 Anthony Luchterhand has posted out and I have been appointed as the Career Manager for the RAE Combat Trades. There are a number of initiatives, and trials being exerted on the Corps and our trades people endeavouring to address the workforce pressures. These new workforce pressures will not lessen into the future and will become standard practice as we progress through our careers. These initiatives and trials also allow us new opportunities and experiences that were not available before.

I will engage early and often in order to be able to support the service need, your developmental needs and your personal goals to ensure that we provide the best RAE outcomes into the future and develop you into the best soldier that you can be.

Construction Trades – ECN 072, 101, 125, 217-11 / 16, 270, 314 & 393 Career Manager: WO1 Golborn Turner (Kit) (WEF Jan 23 – Jan 25)

WO1 Kelvin Baluch's tenure as the Career Manager for the RAE Construction Trades concluded in 2022. Moving forward, it is essential that we continue engagement into CMC24 to ensure career development and your personal preferences are communicated effectively and timely.

Staffing pressures continue to be felt across both the combat and trade portfolios with the following vacancy rates (as at Jul 22) from Sapper to Warrant Officer Class Two:

- Sapper vacancy is deliberately over establishment of 50%
- Lance Corporal currently has a vacancy rate of ~4%
- Corporal currently has a vacancy rate of ~15%
- Sergeant currently has a vacancy rate of ~30%
- Warrant Officer Class Two has a vacancy rate of ~12%

Follow the Sapper.

ROYAL AUSTRALIAN ENGINEERS ORDER OF THE DAY

ROYAL AUSTRALIAN ENGINEERS

On the Occasion of the Announcement of the Passing of Mr John Reddie

03 April 2022

Mr John Reddie passed away on 24 March 2022. Mr Reddie was a long time employee of the John Holland Group and led the Military Secondment Program for John Holland whereby Sapper Officers from both the RAE and RE could undertake a civilian detachment for one to two years.

In this role, he heavily invested with the secondment's development through facilitating experience on major infrastructure projects including underground railways, off-shore terminals and complex bridge construction. This included the Laos-Cambodia freedom bridge.

There are many examples of John fostering a successful relationship with the Corps and making a positive impact with our people. In 2005, John arranged for Sir John Holland, then aged 92, to be the guest of honour at the School of Military Engineering Waterloo Dinner. It was here that Sir John Holland spoke of his service to the Corps during World War II and his pledge to support members leaving service with future employment opportunities. He was also highly active in awarding prizes to the top Regimental Officer Basic Course students of both the full-time and part-time courses as well as a strong supporter of the John Holland Golf Day at the Royal Melbourne Golf Course.

The loss of such a dedicated, professional and caring person will be felt most within his family. The Corps has lost a long standing friend and on behalf of the Corps, I pass on my condolences to John's family and friends. Fittingly, his legacy will continue through John Holland and the contribution to the Engineer Secondment Program and award presentations. John's funeral was held at St Finbar's Church at 86 Centre Road Brighton East on Saturday 02 April 2022.

Ubique

Michael Say,

Brigadier Head of Corps Royal Australian Engineers April 2022

RECENT ROYAL AUSTRALIAN ENGINEERS HONOURS AND AWARDS RECIPIENTS

Australia Day Awards 2022

Conspicuous Service Cross (CSC)

Colonel Roger James McMURRAY. For outstanding achievement as the Colonel Operations of the Headquarters Forces Command Operations Branch

Lieutenant Colonel Kenneth Royston MARTIN. For outstanding achievement as Deputy Director Preparedness Requirements in the reform of Defence preparedness policy, direction and governance.

Lieutenant Colonel Samuel Keith PADMAN. For outstanding achievement as the Staff Officer Grade One, Centre for Australian Army Leadership, Headquarters Royal Military College of Australia.

Conspicuous Service Medal (CSM)

Captain Cameron Alexander LAING. For meritorious devotion to duty as the Project Engineer for Fiji Projects at the 19th Chief Engineer Works.

Queen's Birthday Awards 2022

Medal (OAM) in the Military Division

Warrant Officer Class Two Cameron Joseph ELLIOTT. For meritorious service as an Explosives Detection Dog Chief Trainer, Explosives Detection Dog Capability Manager and Sergeant Major - Warrant Officer Training.

Conspicuous Service Cross (CSC)

Lieutenant Colonel Fabian Ronald HARRISON DSM. For outstanding achievement as the Brigade Major of the 6th Brigade during 2020-2021

Lieutenant Colonel Karl John REYNOLDS. For outstanding achievement in support of the Australian Government contribution to the Pacific Step-Up Initiative.

Conspicuous Service Medal (CSM)

Major Larissa Maree CODY. For meritorious achievement in leadership and management at the Australian Defence Force Academy

Royal Australian Engineers Head of Corps Commendations

Mr Eric (Jock) HOWATT JP, RAE VIC Assn. For exemplary and long standing contribution to charity fund raising since 1988, having raised over one million dollars for the Royal Children's Hospital Good Friday Appeal.

SPR Nathan MOLYNEUX, Combat Engineer, 2 CER. For consistent display of Defence values, excellent Soldier skills and outstanding performance as a member of 2 CER.

MAJ Elliot Hislop, WO1 Sean McAlinden, CPL Mykel Ward, SPR Alistair Wilson. For their outstanding representation of the Corps at the Funeral of Her late Majesty, Queen Elizabeth II.

Royal Australian Engineers Awards

Mr Bob IHLEIN. Receiving the Brigadier General C.H. Foott CB, CMG Award for outstanding contribution to the Royal Australian Engineers as the RAE National Coordinator for Overwatch Australia since 2016, Bob has continually provided a critical service to assist in the ongoing wellbeing of primarily retired sappers throughout Australia whilst also providing a safety network for the prevention of suicide.

LCPL Benjamin LAFFERTY, Plant Operator, 3 CER. Receiving the Lieutenant General F.J. 'Frank' Hickling AO, CSC, for 'Most Outstanding Engineer'.

LT Joshua ELLEMS, Engineer Officer, 2 CER. Receiving the Major General Steve Day DSC, AM Excellence in Engineering Award for 'Most Outstanding Lieutenant (ARA)'.

LCPL Benjamin LAFFERTY, Operator Plant, 3 CER, Receiving the Warrant Officer Class Two R.C. 'Mick' Mace MM, BEM Excellence in Engineering Award for 'Most Outstanding Junior Non-Commissioned Officer (ARA)'.

SPR Sandra MACURA, Electrician, 6 ESR. Receiving the Warrant Officer Class One Barry Wade OAM, CDS Excellence in Engineering Award 'Most Outstanding Sapper (ARA)'.

LT Cindy NGUYEN, Engineer Officer, 22 ER. Receiving the Colonel A.H. 'Sandy' McGregor MC Excellence in Engineering Award 'Most Outstanding Lieutenant (ARES)'.

CPL Stuart MULHERIN, Combat Engineer, 11 ER. Receiving the Warrant Officer Class One R. 'John' Raddatz OAM Excellence in Engineering Award 'Most Outstanding Junior Non-Commissioned Officer (ARES)'.

SPR Daniel JEWELL, Electrician, 22 ER. Receiving the Sergeant Michael Chalk MG Excellence in Engineering Award 'Most Outstanding Sapper (ARES)'.

SPR Deni ROSS, Combat Rescue, 2 CER. Receiving the Sapper Curtis McGrath OAM, RAE Sports Person of the Year.

MAJ Stephen LOMAS, 1 CER. Receiving the RAE Coach of the Year Award.

2022 Head of Corps (HOC) Royal Australian Engineers (RAE) Writing Prize:

1st: CAPT Xavier Vasta – SO3 Infrastructure AHQ, 2nd: MAJ Ryan Mitchell – HQJOC, and CAPT Lara Perovic – 3CER

Awards with Nil nominations in 2022:

RAE Sports Team of the Year Rising Star Award RAE Sport Official of the Year Contribution to Corps Sport

1ST COMBAT ENGINEER REGIMENT

CO Foreword

2022 has been a busy, challenging and rewarding year for the 1st Combat Engineer Regiment (1 CER). As a Regiment, 1 CER deployed in support on numerous security cooperation activities, underwent some excellent Engineer training, participated in the 1st Brigade's Littoral Operations exercise and supported local community engagement.

Force generation and security cooperation activities were a strong focus for 1 CER this year, with security cooperation activities providing excellent opportunities for the majority of our Regiment to deploy into the near region. Section to Squadron sized formed bodies deployed to Malaysia, Philippines, Timor-Leste and Indonesia, and continued to enhance strategic relations with our near region partners. 1 CER also worked closely with our allied and international partners including the Marine Rotational Force – Darwin, the Japanese Ground Self Defense Force and the New Zealand Defence Force. These engagements provided us the opportunity to learn from others and achieve great outcomes across the board.

Throughout August 1 CER participated in the first Littoral Operations exercise designed and executed by the 1st Brigade, being Exercise PREDATORS RUN 2022. This exercise was one of the first steps that 1 Brigade is taking towards developing Army's Littoral Manoeuvre capability. Exercise PREDATORS RUN provided 1 CER the opportunity to form and deploy as a Task Group, while also providing integral engineer support to respective Battle Groups during the Joint land combat phase. Overall, the exercise was a great start point for the Brigade and has set the foundations moving forward into 2023.

The end of 2022 saw a large percentage of the Regiment move on to their subsequent postings and I take this opportunity to personally thank them for their professionalism, dedication and commitment to 1 CER. Through their efforts, the Regiment is well prepared for the challenges ahead and best postured to support 1 Brigade and Army moving forward.

Regimental Headquarters

LT Eleanor Rhodes – Unit Welfare Officer (UWO)

Organically the role of the Unit Welfare Officer focuses on assisting the chain of command with the management of the Regiment's wounded, injured and ill (WII) personnel. Typically, this sees me working with J3-J5 personnel and their chain of command to assist the members attain their individual goals.

From the outside, it looks like the management of WII personnel is my only role; however, this is only part of my people focus. I see my role as looking at the unit's welfare holistically for all Medical Employment Classes (MEC) whether downgraded or not. A large proportion of my year has been focusing on the development, recovery and rehabilitation of all personnel within the regiment. Preventative measures has been a goal of mine this year, I see the phrase 'parking the ambulance at the top of the hill rather than the bottom' as a key descriptor of my goal.

The metaphorical 'ambulance at the top of the hill' is the preventative measures I have control over to assist the chain of command develop a soldier's mental and physical resilience. Within this space this year, I have extended the unit gymnasium to double the space and capability and established a recovery room to allow members to recover from the physical and mental demands of their roles. Additionally, I have been involved with the regiment's assistance to the development of 1 BDE human performance planning.



The new regimental gymnasium extension, a key resource to promote mental and physical wellbeing

Regimental Admin Cell

WO2 Scott Schonberger - Chief Clerk

Clerical and Admin support to 1 CER is a critical function to ensure personnel are READY for training, Security Cooperation tasks and all international and domestic operational activities. As at September 2022, 1 CER has eight ECN 150 (Command Support Clerk) personnel posted to the unit which comprises of a PTE Clerk in each of the Engineer Squadrons, and five personnel in RHQ.

Throughout 2022, our clerks have deployed on a wide range of tasks including domestic operations; Operation COVID-19 ASSIST, unit and BDE level exercises; Exercise GOANNA CANTER and EX PREDATORS RUN as well as international engagement activities; Exercise HARI'I HAMUTUK). Deploying clerks on these activities ensures that the deployed force continues to receive appropriate administrative support including the receipt of entitlements in a timely manner.

The clerks in 1 CER have done a tremendous job in 2022 as they have juggled staffing shortages and a busy operational tempo to produce quality outcomes for unit members. PTE Sam Singut from 23 Support Squadron was rewarded for his outstanding performance in 2021 with the RAAOC Soldier of the year award for the Northern Territory.

I would strongly recommend 1 CER as a posting preference for any ECN 150 personnel as the unit has a great culture and is a rewarding place to work both professionally and personally.

1 Field Squadron

MAJ Peter Witcomb - Officer Commanding

Throughout 2022, the 1st Field Squadron continued to set and exceed high standards – which is due to the drive and dedication that every member displays whist being "Ready, Professional, Proud". This started with the annual mandatory training requirements and individual courses to achieve our baseline readiness, which then flowed into Section Level training designed and ran exceptionally well by the Corporals.

Shortly after this, the Federal Government announced that the ADF would be undertaking Operation AGED CARE ASSIST – and the Squadron took the lead for 1 CER to deploy 100 personnel into Western Australia. Whilst we did not deploy the Squadron into WA, we deployed a team of five into Alice Springs and another team of five into Sydney to augment Independent Medical Teams assisting aged care facilities. This then evolved into five more personnel supporting in Sydney and two personnel in Perth. Concurrently, the Squadron

deployed 10 personnel on Operation FLOOD ASSIST in Lismore, and 10 personnel from 2 Troop to the Philippines as part of the Joint Australian Training Team – Philippines. This saw 37 personnel (close to half the Squadron) supporting Domestic and Security Cooperation Operations. Whilst supporting these operations, the Squadron also completed a range of valuable training.

The limited number of personnel in the Squadron provided an opportunity to integrate the Marine Rotational Force – Darwin engineers into our activities. This was at the forefront during Exercise AMPHIBIAN CRAWL, where Marines assisted in the construction of a Medium Girder Bridge and participated in a 90km zodiac infill to an objective to conduct Engineer Reconnaissance – thus helping the Squadron commence its journey towards Littoral Operations, the vision Army has for the 1st Brigade in Darwin.



Members of 1 Troop and the Marine Rotational Force – Darwin wrestle with the bankseat beam on the Medium Girder Bridge.

The next activity, Exercise AMPHIBIAN WALK, allowed sappers to hone their search and demolition skills and incorporated Marine EOD and explosive detection dog handlers from the Malaysian Armed Forces. The search activities focused on civilian facilities in a scenario that saw an explosive threat present in the lead up to major sporting events. The demolitions serials allowed for various munitions to be destroyed through explosive hazard reduction, and for sappers to reacquaint themselves with a variety of breaching charges.

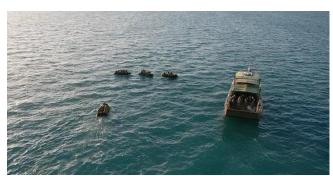
The Regiment then consolidated and deployed into the field for Exercise GOANNA CANTER at Mount Bundey Training Area – something that has not been possible since 2020 due to a range of issues. During this exercise, the Squadron conducted offensive and defensive mounted manoeuvre, established obstacles and a company defensive position, conducted route search, and culminated with an urban clearance. Overall – a great activity for the entire Regiment that reinforced the importance of collective training in the field environment.

In the lead up to the 1st Brigade's Exercise PREDATORS RUN, the Squadron undertook Exercise AMPHIBIAN SPLASH. The exercise focused on engineer specific reconnaissance within the littoral environment. This activity was enhanced with integration of landing craft from 17 Brigade, and Combat Engineer Divers from across the Corps.



1 Field Squadron conducting Route Search within Mount Bundey Training Area.

The activity demonstrated the value of engineers in the context of the 1st Brigade's future operating model – and also surprised a number of campers who had setup their caravans on Gunn Point Beach, being confronted by a troop of engineers securing a beach head as they made their morning coffee.



Members of 2 Troop commence an infill via F470 zodiacs launched from an LCM-8 to secure a beach head and enable Combat Engineer Divers to conduct an underwater beach landing reconnaissance.

Exercise PREDATORS RUN culminated the 1st Brigade's training year, with the Squadron supporting 5 RAR to establish Battle Group Tiger, a manoeuvre element within the 1st Brigade. This activity further saw the Squadron help the 1st Brigade commence their journey towards Littoral Operations. The Squadron Headquarters commanded a Combat Team consisting of 2 Troop operating watercraft, a 5 RAR Infantry Platoon, a Filipino Special Forces Regiment – Airborne Platoon, a 1 MP Bn Working Dog detachment, and a Role 1

medical capability from 1 HB. The Combat Team, utilising a civilian barge, conducted a successful littoral raid of Dundee Beach. Battle Group Tiger then regrouped into a land force element operating within the Mount Bundey Training Area, and was aptly supported by 1 and 2 Troop.

The Squadron closes out a successful year with two engagements being conducted in the near region. 1 Troop deployed personnel on Exercise WIRRA JAYA supporting 5 RAR in Indonesia (Light Urban Explosive Breaching), and Exercise ANJING PERANG in Malaysia (enhancement of the Malaysian Explosive Detection Dog capability). Attention then shifts to individual courses and preparedness as the Squadron commences ownership of the 1st Brigade's Emergency Support Force for the 2022/23 High Risk Weather Season.

9th Field Squadron (Mechanised)

MAJ Timothy Murphy – Officer Commanding

As we reflect on 2022, it's amazing to consider how much has been achieved by 9 Field Squadron. Teams have travelled the country for courses and training activities, and deployed into the near region including Timor-Leste, Malaysia, Singapore, Thailand and Vanuatu. In between all this, we have demonstrated outstanding competence in the field of

mechanised engineering, and comprehensively demonstrated the mismatch between mechanised and motorised forces.



Sappers teach the F-FDTL basic combat engineering skills.

Exercise MONSOON SAPPER saw 9 Field Squadron hit the ground running with an eight week training exercise commencing in February 2022. The exercise saw the execution of rifle practices and MK 3 pistol qualifications as well as an extensive urban, route and area search package culminating in a week long Full Mission Profile that was executed in the greater Darwin region.

Soon afterwards, 7 Section deployed to Timor-Leste to assist the F-FDTL in running their basic combat engineer course in Metinaro. Throughout their time they made many friends through our interwoven national histories and fondness for mateship and laughter. The team learnt about leadership styles, tutoring and interpersonal skills and they were amazed by the kind nature of the Timorese people and were humbled by their national pride.

In May 2022 an element based on 5 Tp deployed on Rifle Company Butterworth 136 attached to C Sqn, 1 ARMD. It commenced

with the deployment to Sik and Kulum National Parks to develop survivability skills in the jungle whilst conducting infantry minor tactics. Sappers imparted knowledge on basic search and exploitation of caches, and constructed small footbridges.

The RCB 136 team then worked on their lethality and skill whilst using high explosive weapons at the PULADA range complex. The company worked at a significant rate firing all natures on the 84mm Carl Gustav, 40mm GLA, 66mm rockets, blue bolt urban serials and a number of combat shooting serials with small arms. The main effort of this FTX was to develop the company in their ability to employ HE weapons in the close jungle terrain.

The culminating field exercise - Exercise CHAPEL GOLD - was the main effort of the entire RCB 136 rotation. This exercise is held annually in the province of Nakhon Sawan, Thailand in partnership with the 2nd Battalion Royal Thai Army (RTA). The Sappers delivered lessons on cache exploitation, basic search and the makeup and functionality of IEDs that are found in the near region. The company received lessons from the RTA on jungle survival, urban operations and culminated in a combined Battalion field



Sappers from 9 Fd Sqn construct a foot bridge

training exercise (FTX). After the FTX the company had the opportunity to visit Hell Fire, walking the grounds that Australian POWs had constructed the Burma railway under Japanese occupation in WW2.

Concurrent to RCB 136, the remainder of the Squadron deployed on Exercise GOANNA CANTER, which provided an excellent opportunity for Mechanised Engineers of 1 CER to build their skill sets in both the Engineer specific tasks and overall mechanised life. 9 Field Squadron were assigned as REDFOR, which entailed search tasks, mechanised breaches, mechanised assaults, obstacle development and integration and defence of Decisive Terrain. This demonstrated the significant mismatch between the capabilities of a mechanised and motorised force, and cemented 9 Field Squadron's place as the premier warfighting element in 1 CER.



9 Fd Sqn winning the fight at the UOTF

The team then deployed to Exercise BOARS RUN, a 7 RAR led urban operations exercise training Infantry and Engineer Combat Teams. The exercise was conducted through a series of buildings previously used as the Holden manufacturing facility in Elizabeth, South Australia. Each Combat Team commander and their subordinate manoeuvre commanders employed their engineers in varying ways to great effect. The adaptability and resourcefulness of the sappers was admirable.

After a well-earned break, Exercise PREDATORS RUN somewhat mirrored

our Regimental exercise as we were assigned as REDFOR for the duration. 9 Field Squadron integrated with BG BOAR and was force assigned to develop positions, integrate obstacles and was utilised as another manoeuvre element, successfully interdicting and destroying BG TIGER.

The last major activity of the year for the Squadron was be the annual community engagement activity in East Arnhem Land.

The activity focusses on integration with the NORFORCE Arnhem Squadron, and allows the Squadron to integrate with the ASRAC, Yirralka and Dhimurru Rangers in conducting tasks, such as sharing knowledge, installing basic infrastructure, and searching routes for UXOs dumped after bombing runs over the nearby RAAF airstrip on Milingimbi. In completing this search task, the Squadron was be able to confirm or deny the presence of historical

ordnance, and reopen sacred sites and traditional hunting grounds for the local community.

The last two years have been busy and rewarding. Teams have deployed all over the country and the near region, demonstrating excellence and flexibility beyond their age and experience. I know that as I depart, I leave behind an outstanding team and capability.



9 Fd Sqn working with the Dhimurru Rangers

23rd Support Squadron

LT Jimmy Parker, RE - Ex LONG LOOK participant

2022 has been another eventful year for the 23rd Support Squadron with numerous courses, support to various units across Army, field exercises and overseas Security Cooperation activities. The Squadron supported OP FLOOD ASSIST in SE QLD and northern NSW to provide DACC support in conjunction with the 2nd Combat Engineer Regiment's efforts in their region. Concurrently, LT Oldjohn led personnel from across the 1st Combat Brigade on Operation AGED CARE ASSIST in Perth, to support state wide healthcare staff in the provision of care to the elderly during the COVID-19 pandemic. Support to other units was one of Combat Rescue Troop's main efforts this year. LT Evans and a team from Combat Rescue Troop supported the 16th Aviation Brigade alongside their peers from the 3rd Combat Engineer Regiment on Exercise VIGILANT SCIMITAR where their efforts in both the white role and green role were to an excellent standard.



A composite Combat Rescue team from 1 CER and 3 CER working with MRH from 5 AVN Regt on Exercise Vigilant Simitar in Townsville.

Exercise GOANNA CANTER was held in June this year and saw the Squadron deploy to Mount Bundey Training Area for a two week period. The exercise was a great opportunity for the range of support squadron specialities to conduct their roles in a field environment. The Squadron faced and overcame a number of challenges such as manoeuvring as a complete Force Element in the field, attaching Combat Rescue to a Field Squadron in direct support, establishing and maintaining a Water Point, deploying the Dry Support Bridge in a tactical setting, construction of a Brigade sized Command Post bunker, a Role 2E concrete

pad and a HLZ. The entire exercise was well received at all levels of the Squadron with some fantastic learning outcomes.

The capstone activity for the Squadron this year was Exercise HARI'I HAMUTUK (Ex HH) in Timor-Leste. The exercise focuses on the development of Combat Engineering and Combat Service Support skills for the host nation's armed forces, the Falantil – Forcas Defesa de Timor-Leste (F-FDTL). The exercise is inherently multinational in nature and execution, and



Specialist Troop deploying the Dry Support Bridge to enable lines of communication within Mount Bundey Training Area



External cladding commences on the accommodation block constructed at the remote F-FDTL border outpost in Timor-Leste.

Ex HH is supported by personnel from across the ADF, as well as personnel from the New Zealand Defence Force, Japan Ground Self Defence Force, and the United States Marines Corps.

A key output for this year's exercise was the construction of an accommodation building at the Alto Lebos Border Outpost in order to improve the living and working conditions for the rotational Infantry force of the F-FDTL that occupy it. This construction project was delivered by the Squadron's Construction Troop under the command of LT Sorial. Living in austere conditions in self constructed tented accommodation, Construction Troop's

tradespersons were bolstered with other RAE Tradesperson's from the 6th Engineer Support Regiment and the 2nd Combat Engineer Regiment.

The force was supported by medical personnel from the 1st Health Battalion, cooks from the 10th Force Support Battalion and signallers from the 1st Combat Signal Regiment. Fully in the spirit of the exercise, Construction Troop was also joined by tradespersons from the F-FDTL to develop their construction engineer capabilities, working as a cohesive team to achieve the project. This was completed under a junior site foreman, LCPL Ryan, who managed the individual sections, and together they achieved a 90% completion standard with the F-FDTL able to finalise the project after the exercise concluded.

During Ex HH 22, the ADF conducted an exchange of personnel with the United States Navy Seabees. CPL Beale led a small team that worked with the Seabees on their community

construction project at Baucau where they aided in building a new school house. The team were employed to great effect alongside the Seabees where they acted as a force multiplier due to their wide ranging skill sets and keen attitudes.

Outside of construction, the Squadron members were based out of Metinaro Military Base, and sought to develop the F-FDTL by delivering a series of Military Training Teams (MTT). The training teams were supported by a wide range of units from across Army and the other participating nations, and saw a daily integration of differing languages and culture. This was a great opportunity for the junior soldiers and NCOs who took ownership of the instruction of their subject matter and delivered effective and meaningful training to the F-FDTL.



1 CER plant operator SPR Ben 'Shooter' Masterson working with JGSDF and F-FDTL to emplace a new culvert at Metinaro Military Base in preparation for the wet season.

The culmination of these teaching activities was a joint activity run on base whereby

Combat Engineers requested transport and medical support through and coordinated by an F-FDTL run Command Post. Teambuilding amongst all nations was enhanced weekly on

Thursday mornings with soccer and volleyball matches which surprisingly the ADF teams didn't lose, even winning a couple!

For the first time this year the F-FDTL organised a cultural tour of Dili that included visiting two resistance themed museums and the hiding place of Xanana Gusmao during the Indonesian occupation. The visit was a key highlight of the exercise and gave all ADF members a better understanding of Timor-Leste's tumultuous history and the spirit of the Timorese people.

For the remainder of the year the Squadron prepared for the High Risk Weather Season and supporting the Commanding Officers handover activity. On behalf of the Officer Commanding and Squadron Sergeant Major, a big thank you to all Squadron personnel for their efforts and work throughout 2022.

Operational Support Squadron

LT James Heiner, Technical Support Troop Commander

2022 has been a busy and challenging year for OSS, from conducting courses in Quarter one, to supporting the first Regimental level exercise in several years in Quarter two and participating in Exercise PREDATORS RUN in Quarter three. Other smaller contributions also saw our soldiers support Operation AGED CARE ASSIST in Perth, with their conduct being of a very high standard. Additionally, OSS supported instruction and water production in Nhulunbuy on the Gove Peninsular, while working with the MRF-D and TNI in HADR related exercises.



PTE Heinze and PTE Clutterbuck deploying the Squadron Command Vehicle

With the usual surge of tempo during the Battle Preparation Phases, OSS switched targets rapidly to manage Sustainment Support as well as their own readiness within a condensed timeframe. Exercise GOANNA CANTER saw all of 1 CER in Mount Bundey Training area (MBTA) for the first time in several years, which thoroughly tested the logistic lines of communication given the diverse range of equipment held within the Unit. A small but adaptive team in MBTA saw effective support being provided to all dependencies from a mobile A2 Echelon with a link rearward to C/S L2 from 1 CSSB.

'My experience from Exercise GOANNA CANTER was overall positive, as this would have been my first field exercise simulating high-end warfighting. Most memorably, I participated in a demolitions confidence practice with the combat engineers. This was a great experience, not only showing their capability, but the requirements to conduct military engineering tasks professionally and effectively. I have also attained a greater understanding of how we, as distribution operators, conduct supply support in the field. Finally, I also gained insights into how much communication and coordination is needed to ensure we can deliver what's needed, in full and on time.'

- PTE Clutterbuck

Building from the lessons learned from Exercise GOANNA CANTER, Exercise PREDATORS RUN saw OSS support a very diverse team as part of TG GOANNA, supporting elements as diverse as the WPDS from within 1 CER, to Tanks from 1 ARMD

REGT with an M88 being embedded within E5. While the TG was the main effort for a short period of time, E5 gained a sound appreciation of the tempo of support required to sustain the TG when conducting operations.

'Exercise PREDATORS RUN was my first field activity after being promoted to CPL which gave me a new lens to appreciate Command and Control as well as the passage of information both up and down the Chain of Command that is required. We conducted the full scope of tasks for an A2 Echelon within a BG, supporting multiple dependencies that we are not normally responsible for while managing our own security. The biggest lesson I learned from the activity was the requirement to be proactive as a JNCO to ensure our own readiness and reduce the load on the headquarters element'

- CPL J Robson



PTE Gregson conducting a team briefing

Switching priorities again it is now time for OSS to reorientate to the task of supporting the ESF within the Northern Region of Australia as well as the near region. The squadron was postured to sustain the Regiments' CONFE requirements and were very busy in the final lead up to the Christmas stand down period.

2ND COMBAT ENGINEER REGIMENT

Regimental Headquarters

CAPT Ancel Lupke – Adjutant

2022 has been another great year for the 2nd Combat Engineer Regiment (2 CER). The Regiment has successfully delivered engineering capabilities globally, through the conduct of HADR support, Security Cooperation activities, Domestic Disaster Relief Operations, collective field training exercises, individual barracks training, and a multitude of all-corps and specialist courses.

The year started with 2 CER being called upon to render Humanitarian Assistance and Disaster Relief (HADR) to the Kingdom of Tonga after the eruption of the Hunga-Tonga-Hunga-Ha'apai volcano, on 15 Jan 22. 2 CER RHQ with a reinforced 7 Combat Engineer SQN deployed by Sea in support of OP TONGA ASSIST over the period Jan – Mar 22 for the provision of Mobility and Sustainability effects. The 2 CER Combat Engineers hit Tonga's devastated beaches and rapidly started work recovering local infrastructure, repairing services and removing several tons of rubbish and



RAE and RFMF sappers on top of the newly constructed NEB in Suva

debris. For weeks our Sappers endured suffocating humidity and an onslaught of mosquitoes, determined to help relieve some of the anguish and devastation, and most importantly helping the Tongan people to rebuild.



BEPB being launched off a HX77 in to the Enoggera
Dam at GAL BKS

It was only three weeks after the Regiment's initial deployment to Tonga, that Australia's eastern coast experienced one of the nation's worst recorded floods. As a result, 2 CER deployed its remaining force elements on Op FLOOD ASSIST 22, which saw continued relief efforts to SE QLD and NNSW. 2 CE SQN, reinforced with elements from 24 SPT SQN, led the delivery of engineering efforts, including route clearance, rubbish removal, footbridge construction, building corduroy roads, transporting raw materials for bridge abutments, and chainsaw clearance tasks.

After 2 CER finally re-consolidated in May, the Regiment resumed its Advanced Collective Training program, designed specifically to prepare the unit for Ex TALISMAN SABRE 23 (Ex TS 23). This program included a deliberate period of courses and training, focused on individual preparedness and Combat Behaviours. As such, 2 CER has since completed 105 separate courses and issued over 1550 proficiencies to individuals. Despite how big or small, every qualification and re-currency drives the Regiment forward, helping to posture it ready for participation and validation on Ex TS 23.



SPR Tomasella and CPL Ferguson mid push ups during the boat PT race

Throughout the second quarter of 2022, 2 CER continued to make significant contributions to Security Cooperation activities, including deployments on Ex CORAL SAPPER 22 (Ex CS 22) and CBRND International Seminar. In support of Ex CORAL SAPPER the unit deployed a Combat Engineer section to Fiji in April, where they helped the Republic of Fiji Military Force (RFMF) Engineer Regiment to construct a Non-Equipment Bridge. A second iteration travelled to Fiji in September, with a section of tradesman to lay the foundations for the construction of future local infrastructure. Meanwhile, in support of the L2110-1B IOC, 2 CER's Adjutant represented the Army at the CBRND International Seminar for Company Commanders, hosted in Germany. The seminar addressed critical assessments of capability (current and future), held special guest led case-studies, and facilitated multinational scenario response and simulation activities. The future will see 2 CER continue to build greater relationships with its regional collation partners as it postures to provide further support to the South-West Pacific region.

In the third quarter, 2 CER undertook one of the largest and most ambitious Regiment-led exercises in recent years, specifically designed to practice Mobility and Sustainability effects. The Operational Support Squadron (OSS), with support from 7th Combat Service Support Battalion, exceeded expectations as it expertly mobilised the deployment of three engineer bridging fleets, including the Medium Girder Bridge, Improved Ribbon Bridge, and the Infantry Foot Bridge. After establishing an Engineer Equipment Park at Wide Bay Training Area, OSS maintained 24hr operations as it concurrently delivered and recovered all three bridging assets. This allowed both 2 and 7 CE SQN to accomplish outstanding engineering feats, through their delivery of mobility effects by day and by night. Lastly, Archimedes principle was finally verified, as it was proven first hand that the Army Utility Work Boat is in fact positively buoyant, and that a bucket should be held close at hand if you wish the bench seats to sit above the water.

This year, 2 CER was proud to recognise the sacrifice, loyalty, and devotion to duty, of one the Corp's hardiest Sappers. WO2 Andrew Pitt, who has faithfully served wearing the RAE colours for over 40 years, was awarded the Federation Star. We wish him luck in the coming years as he takes a posting to 12 CE Works, and we hope his golf handicap will soon be in the low teens.

At the start of 2022, the new members of the Regiment recognised there were big shoes to fill as they felt the pressure of living up to the outstanding achievements made in the previous year. 2 CER's domination in 7 Brigade's annual competitions were represented by the three enormous trophies, which barely fit in the Regiment's cabinets, being the 7 Bde Military Skills Competition, Sports Competition and the Brigade Commander's Trophy. This

trifecta is one of many measures which quantify 2 CER's status as the Premier Regiment. This year the Regiment is again looking favourably to achieve similar impressive results.

In the final quarter of 2022, 2 CER focused on practicing and developing specialist skills, including: Combat Rescue, WPDS, Dry Support Bridging, tree felling and milling, high risk search and explosive hazard reduction. Concurrently, the Unit is postured ready to support the HRWS and deliver HADR within our region, as required.

2 Squadron

Captain Brenden Baade

2nd Combat Engineer Squadron (2 CE SQN) commenced the year with foundation warfighting alongside Battle Group RAM (8/9 Royal Australian Regiment) centred on the Combat Shooting Continuum through Exercise RAMSHOT. The Exercise served as the start point for combat engineer and infantry integration, in a warfighting context, for the long 18 month road to Exercise TALISMAN SABRE. The Combined arms integration was, unfortunately, expedited in a DAAC context with the Squadron deploying, at short notice, under Task Unit RAM to Northern NSW in support of NSW Op FLOOD ASSIST 22.



SPR Huxley and RFMF Engineer moving logs for nonequipment bridging in Huonbrook, NSW

OP FLOOD ASSIST 22 2 CF SQN's deployment t

2 CE SQN's deployment to the Byron Bay Shire was centred on assisting the local community disaster relief efforts and partnering with local councils to deliver Military and Technical Engineering effects. The Squadron, reinforced by 24 SPT SQN and a plant section from 21 CONST SQN, enabled emergency and support services to gain access to communities cut off by the floods.

The combined efforts of these elements contributed to the: repairing of roads affected by landslides, technical and non-technical engineer recon, the provision of supplies to rebuild road and bridging

infrastructure, the construction of corduroy roads and non-equipment bridges and general support to clean-up efforts. Of important note, 10 Troop provided access to 500 isolated community members through field engineering with our brothers and sisters from the Republic of Fiji Military Forces.

Between domestic operations and the regimental training reorganisation, the Squadron conducted training in demolitions, watermanship, CBRN support to L2110 and ECM upskill. In addition, 11 Troop provided integral support to WONCO-A with the provision of a TP sized enemy party to SUB-1 CPL in Wide Bay Training Area (WBTA), whilst 10 Troop provided watermanship support to AHQ enabling UAS testing in WBTA.



10 TP and RFMF constructing Corduroy Road in Huonbrook, NSW

EX TERRIER RUN 2

From July through to September, the Squadron shifted focus and commenced gap crossing training. Initially, this involved the revision, construction and operation of the IFB, IRB and MGB to establish the foundations for the crucial capabilities. The troops were then tested in a demanding Regiment Field Training Exercise at WBTA. In a non-permissive environment, Troop bridging disciplines were highly adaptable and efficient, meeting an important milestone on the road to Talisman Sabre.



SPR Molyneux taking part in the 2 CER Soldier's Competition, GAL BKS

EX DIAMOND STRIKE

In November, 10 Troop was provided another opportunity to integrate with Battle Group RAM on Exercise DIAMOND STRIKE. The Troop provided integral mobility and countermobility support to a Battle Group Advance, setting a high standard and example for route search, gap crossing and battle field clearance in the rural and urban environments. CLOSING REMARKS

Finally and most importantly, the Squadron congratulates the following members for their hard work and achievements this year: SPR Molyneux, LCPL Huxley, LCPL Kriek, CPL Ferguson, CPL McWilliams and CPL Goh. Your efforts have been recognised and have contributed greatly to the success of the Squadron this year. Further, we extend thanks to the sappers, soldiers and officers for your dedication and sacrifices for the Squadron; it has been a demanding year. Moving forward, know that we are in a good place because of your efforts,

and can focus on the path to Exercise TALISMAN SABRE 23.

7 Combat Engineer Squadron

Major David Ferwerda, Officer Commanding

Tonga to the Ukraine! 7th Combat Engineer Squadron (7 CE SQN) commenced the year with a short notice deployment to the Kingdom of Tonga following the eruption of Hunga Tonga–Hunga Haʻapai, a submarine volcano in the Tongan archipelago in the southern Pacific Ocean, on 15 January 2022. Squadron HQ and a Combat Engineer Troop deployed on OP TONGA ASSIST 22 with other elements from 2 CER and 7 Brigade to the end of March providing HADR support to the people of Tonga. In addition, the remaining Troops in 2 CER deployed on OP FLOOD ASSIST out to Gympie and NSW to support flood relief efforts.

On our return from operations the Squadron had a brief rest over April and support to ANZAC Day activities in Gayndah before recommencing the training year. In June, the Squadron sent a Troop to support 6 RAR on Exercise SOUTHERN JACKAROO at Shoalwater Bay providing mobility support to Combat Teams from 6 RAR, Japan Ground Self-Defense Force and USMC Marine Rotational Force - Darwin. The mechanised

capability continued to be developed within the Squadron and included releasing two of our M113AS4s to Ukraine resulting in a few buckets within the AO with a number of Lazy 'E's under the paintwork.



M113AS4 Armoured Personnel Carrier bound for Ukraine is loaded onto an Antonov An-124 cargo aircraft, part of the Australian Governments military assistance package to the Ukraine

The 2 CER training program saw the Squadron focus on combative and specialist courses mid-year including demolitions leading into the TERRIER RUN series. A good effort by all in the Squadron saw 14 Troop taking out "best Troop" in the Regiment at the conclusion of Exercise TERRIER RUN II which primarily focused on search and bridging operations. The end of the year continued with specialist courses and enhanced search and EHR training in Canungra including the construction of a Mabey (Bailey) Bridge in support of 1 Field Squadron Association



Dedication ceremony for the Bridge of Friendship at ANZAC Park, Toowong on Remembrance Day. The bridge commemorates the

memorial in ANZAC Park, Toowong.

The Squadron finished the year ready to support High Risk Weather Season and in a good position for 2023 and the "Road to TALISMAN SABRE".

Semper Paratus - Always ready!

OPERATION TONGA ASSIST 22

LT Lauren Barclay, 13 TP COMD

On the 19 January 2022, 7 CE SQN deployed to the Kingdom of Tonga, following the volcanic eruption of Hunga Tonga - Hunga Ha'apai and the subsequent tsunami that resulted in damage to numerous islands of the Ha'apai group. 7 CE SQN members were recalled from leave, prepped and embarked on HMAS Adelaide, for some with as little as 48 hours notice.

In the early hours of a Thursday morning, members of 7 CE SQN and CONST TP embarked on HMAS Adelaide and settled in for the six day sail to Tonga. After two weeks of patience at anchor and a brief interlude following a power outage, the Squadron departed for the Island of Atata. A small tourist island off the main island of Tongatapu.



Damage to Atata Island in Tonga, following the eruption of the Hunga Tonga-Hunga Ha'apai underwater volcano and subsequent tsunami

The Squadron got underway with the large scale clean-up operations, building repairs and the repatriation of water tanks to enable the people of Atata to return to their homes on the island. The sheer destruction the wave had caused was evident in the multitude of concrete slabs left, with homes completely wiped clean into the surrounding ocean. The island itself caused many logistical challenges due to the destruction of the small pier and no viable access for larger watercraft on the beaches due to the fringing reef. The plan was then devised to airlift our plant equipment from the ship to the island contributing greatly to the

success of the Squadron on Atata and other islands. The Squadron worked tirelessly alongside Republic of Fiji Military Forces (RFMF) and French Army New Caledonia (FANC) counterparts to clean-up the island and repair and restore power to two school buildings and the island's churches.

After ceasing our work on Atata Island the force's main effort shifted to supporting the Ha'apai group further to the north and specifically Nomuka Island. With lessons learnt regarding the enablement of logistical support and Air Mobile Operations of plant equipment the Squadron pushed forward a combined force consisting of an RFMF Troop, FANC Section, Australian CE Section, Forward Recovery Team and plant equipment (JD-450J and SSL). This force enabled the offloading and distribution of the newly named BIRK (Basic Island Reconstruction Kit).



SPR Pengelly-Perren clears rubble on Atata Island as part of Operation TONGA ASSIST 2022

Each BIRK contained an island specific quantity of Class IV construction stores, including polyurethane water tanks which proved a "fun" challenge to float in from the landing craft. Highlights of our time on Nomuka included the hasty construction of 3km of road, church

service run by Nomuka elders, integration with our foreign partners and the airlift return of the JD-450J which ended up being a little stuck in the mud.



SPR Kirsty Scott and SSM 7 CE SQN, WO2 Ian Hallt, unload building supplies on Nomuka Island, Tonga, during Operation TONGA ASSIST 2022

Following the return from Nomuka Island. The JTF moved from HMAS Adelaide to HMAS Canberra in a 'cross-deck' of all vehicles and personnel. Following the move, we commenced island hopping to islands further North in the Ha'apai group. This saw, a small team moved onto small islands with limited access from vessels, via air assets to clear HLZ's. This allowed trade and GD's to get onto islands and commence clean-up operations and minor repairs, including restoration of power to school buildings, access to tanks and plumbing and minor construction works.

Road to TALISMAN SABRE

LT Frazer Kamp, 14 TP COMD

14 Troop (14 TP) began the year reorienting from OP Tonga Assist 2022 onto its new objective – Talisman Sabre 2023. This task commenced with Exercise SOUTHERN JACKAROO (EX SJ). EX SJ was a tri-lateral exercise with elements from the Australian Regular Army, US Marines Corps and Japan Ground Self-Defense Force. 14 TP was tasked to provide mobility support to the varying combat teams, each commanded by one of the different nations present, as they participated in a mounted Combat Team advance.

This saw 14 TP conduct clearance of vulnerable points, dealing with explosive hazards and culminated in the breach of an enemy defensive position. Whilst the breach managed to culminate the TP many times, by the final attempt we had it down to a tee in what I'm sure was total destruction of the enemy. The first steps towards TALISMAN SABRE were complete.

14 TP dutifully conducted refit to fight and then, as 14 TP does, rapidly redeployed onto Ex TERRIER BLAST (EX TB). The goal of EX TB was to further develop our demolitions skills and also proved to be a good exercise in creativity. 14 TP had to deal with some unique and challenging targets such as denying the



14 Troop supporting a Combat Team from USMC Marine Rotational Force - Darwin on Exercise SOUTHERN JACKAROO 2022

enemy use of a water pump, light urban explosive breaching and of course "who can explosively cut a Lazy E". With these challenges came unique solutions, nothing a Sapper can't do with a good dose of "sappernuity". The conclusion of EX TB left us with the knowledge to provide explosive effects on TALISMAN SABRE but unfortunately no Lazy E for the Troop memorabilia.

Finally, the Regiment began the search for the premier troop within 2 CER, who would prevail as the champion TP on the road to Talisman Sabre? With the challenge set the TP HQ stayed late and set in stone a plan that would prove the premier troop to be 14 TP. The TP led the way for the Regiment in many ways, proving the IRB could take an M1A1, pushing the watermanship capability to its limits (specifically the sea stomachs of 14 TP Sappers after a trip to the fish and chip shop) and of course building and stripping the MGB at great speed. Apparently this wasn't enough for the Regiment to decide so the CO made EX TERRIER RUN II (EX TR II) the battlefield to determine the premier troop.

On EX TR II the Troop was assessed on their ability to; construct a 16 bay MGB, raft two AS4s variants along a tidal river system, conduct CBRN surveys and route and area search. The TP built the MGB in under six hours, rafted by night where parts of the river were less than 50m wide and shallow enough that the raft would occasionally bottom out – the risk of beaching was an ever present thought in the back of the mind of CPL Greenwood (Raft Commander), and of course 14 TP searched further along the route search than any other TP. After completion of the exercise we had our obligatory end ex barbeque which was made all the more sweeter with the slab of Great Northerns awarded to 14 TP, the premier Troop! Hard earned thirst and Talisman Sabre once again one step closer.



Sappers from 14 Troop enjoy a moment after completing a difficult 16 bay MGB build with M113AS4

24 SUPPORT SQUADRON

By MAJ Zavia Tiplady

The year has seen 24 Support Squadron build on existing and emerging capabilities, deploy on two operations, support Regiment and Brigade exercises (as well as conduct SQN lead-up exercises), and participate in Security Cooperation with the Republic of Fiji Military Forces (RFMF) Engineers.

The eruption of the Hunga Tonga-Hunga Ha'apai volcano in early 2022 saw specialist capabilities from Combat Rescue, Construction and Specialist Troop deploy with other regimental force elements to support the Kingdom of Tonga.

The subsequent devastating floods early in 2022 throughout QLD and NSW saw small contingents comprising the remainder of the SQN, deploy to Gympie, the greater Brisbane Region and the Lockyer valley as well as Northern NSW in support of the local government response efforts. Once the Squadron was able to reconsolidate, training on our key niche capabilities were prioritised. Specialist Troop focussed on a number of foundation Engineer



24 SPT SQN at Wide Bay Training area

capabilities including tree felling and the Portable Sawmill. The Dry Support Bridge capability has also continued to be developed with the Squadron running its second course in as many years in an effort to build knowledge and redundancy in the various qualifications. The Squadron hosted four Engineers from the RFMF as part of Exercise CORAL WARRIOR who participated in the Portable Sawmill Course, route repair training at Canungra and Engineer Recon tasks. All four deployed with the Regiment on Operation NSW FLOOD ASSIST 22, enhancing our ability to support the local community.

Combat Rescue Troop has continued to develop its capabilities in line with the transition from Emergency Response. Their focus has been on HAZMAT mitigation in the main training block as well as prioritising promotion courses for select members. The troop has also partnered with Queensland Fire and Emergency Services, developing relationships and training together at their purpose built Firefighting Whyte Island facility.

The Squadron finished the year by qualifying members in multiple drivers' codes and specialist courses in preparation for Exercise TALISMAN SABRE 23 as well as preparing to support the Australian people over the High Risk Weather Season.

Construction Troop

By LT Josh Ellems

Construction Troop was busy throughout 2022 supporting two operations, major exercises, security cooperation and continuing to develop its foundation warfighting and construction capabilities.

The year started with several members of the Troop deploying on Operation TONGA ASSIST at short notice. The team provided horizontal and vertical construction support to the relief operations following the volcanic eruption and subsequent tsunami. A highlight of the Operation was the airmobile insertion of plant equipment via CH-47 Chinook, enabled by CPL Shane Tickner.

Concurrently to Operation TONGA ASSIST, several members of the Troop deployed on Operation FLOOD ASSIST. The Troop provided plant support to clear roads, which enabled

access to dislocated communities in the Byron Bay region. The supply of potable water was restored to a cut-off community, largely enabled by the work of SPR Chad O'Connell.

Upon the return of members from Tonga and Byron Bay, the Troop shifted its focus to developing its foundation warfighting skills during Exercise CROC WALK at Wide Bay Training Area. The Troop then transitioned into a period of developing specialist skills, running a course-period with a focus on driver qualifications. This period allowed members to receive 40M, HX-77, Skid Steer Loader and High Mobility Engineer Excavator qualifications among others.

The Troop was fortunate to host its counterparts from the RFMF on two separate occasions during their deployments to Australia as part of Exercise CORAL SAPPER. The Troop conducted mutually beneficial training in both vertical and horizontal construction. The Troop was fortunate to send a Trade Detachment and Plant Operator to Fiji on the second iteration of Exercise CORAL SAPPER. Led by CPL Mathew Tyler and LCPL Kane Ramon, the team worked alongside their RFMF counterparts to construct a new Plant Machinery Shed at Queen Elizabeth Barracks in Suva.

Throughout the year, the Troop provided Plant Detachments to support Exercise SOUTHERN JACKAROO and Exercise DIAMOND STRIKE, led by LCPL Ash O'Neill on both occasions. The Troop also provided construction support to the Regiment, of note constructing the 2 CER Combative Centre, a Bridging Training Area at the Enoggera Close Training Area and upgrades to the Unit Training Facility.

The training outcomes achieved and experience gained throughout 2022 has positioned the Troop well moving into 2023.

Combat Rescue Troop

LT Sam English

The year to-date has seen Combat Rescue Troop balancing the concomitant requirements of maintaining legacy skillsets, and developing new skillsets in line with the changing trade direction. The troop has also supported international engagements including Operation TONGA ASSIST and Exercise CORAL SAPPER, as well as contributing to domestic operations through Operation FLOOD ASSIST.

Currency training has focussed on the maintenance of skills and knowledge in firefighting, confined space rescue and HAZMAT. Where possible, this training has been completed in conjunction with appropriate partner agencies to enhance interoperability and increase the



QFES training COLAB

fidelity of the training serials. In particular, Queensland Fire & Emergency Services (QFES) were forthcoming with training support and integration opportunities. This cooperation in training culminated in a live-fire exercise at the QFES facility at Whyte Island, where Combat Rescue Troop was able to develop their theoretical knowledge of structural fires, and work as part of an inter-agency team to solve complex firefighting situations.

The changing trade direction of Combat Rescue has generated a need to develop additional skillsets, and training blocks on soldier skills, reconnaissance, incident management and triage have been built into the training year. With a view to building working relationships within the wider army, much of this training has been delivered by subject matter experts.

Early in 2022, an iteration of infantry minor tactics built the foundations for training in reconnaissance and patrolling from Recon Platoon, 6RAR in November. Combat First Aid certifications and re-certifications have been enhanced by skills maintenance training and instruction with 2 HB and 11 Bde, and Combat Rescue's CBRND capability has been bolstered with several members upskilling at the School of Military Engineering over the year. Existing skillsets in technical rope rescue have been enhanced by conducting tactical rope rescue.

Together, the skillsets developed and maintained over the year 2022 have set Combat Rescue Troop up for success in the 2023 training year – particularly in the lead up to Ex TALISMAN SABRE 23.

Specialist Troop

LT Alexander Collier

The Troop has supported the 7th Brigade since the beginning of the year through applying our technical skills and specialist training IOT increase Brigade capability. The year began with the short notice deployment in Support to the Kingdom of Tonga which saw the operation of the Water Purification Distribution System, and supporting Section sized force, to provide potable drinking water to the people of Tonga. The soldiers that remained behind concurrently delivered CBRN-D training and exposure to our Dry Support Bridge (DSB) capability to support 2nd/14th Light Horse Regiment. Specialist Troop continued to support capability within 7th Brigade by enabling the 6th Royal Australian Regiment to refresh their CBRND training in preparation for their 'Dog Cup' Infantry competition. Members from the Troop also provided Battle Noise Simulation support to 8th/9th Royal Australian Regiment's Exercise RAM HORN II.

A significant internal suite of courses was delivered; including the DSB and Portable Sawmill (PSM). Noting that the DSB is a relatively new and developing skillset, this suite of courses saw members from 3CER travel down to Enoggera Barracks to increase Army bridging capability across a few passionate specialists. The quality of the training and the investment of the members are testament to the professional standards within Specialist Troop and the trainees from 3CER. A newly qualified member of the DSB course was selected to assist 3CER in developing their own DSB capability within the field environment on two separate occasions. This resulted in the member's efforts being recognised by the 7th Brigade Commander directly, who awarded the member a Head of Corps commendation.

To forecast for the Regiment's field commitment to Talisman Sabre 2023, Specialist Troop has supported a suite of specialist courses as trainees and instructors including:

- Two suites of courses for the DSB.
- Two PSM courses.
- EDDH on the job training course.
- HX77 and 40M driving courses.
- Enabled the Regiment in conducting the Bridge Erection Propulsion Boat course.

• Enabled the Regiment in conducting the Bridge Boat Interface course. The Explosive Dog Detection Handler (EDDH) Section has supported multiple requests from the Regiment and Brigade throughout the year. This includes supporting a 2nd Combat Engineer Squadron activity at Wide Bay Training Area and 7th Combat Engineer Squadron during Exercise Vigilant Scimitar – which comprised of airmobile operations. The Section was able to further increase currency and competency with their Dogs through the conduct of scenarios in a variety of environments in non-Defence training areas. This included the conduct of training at the Queensland Maritime Museum, the Gabba, and Suncorp Stadium.

Specialist Troop supported the 2nd Combat Engineer Squadron and Regiment Headquarters during Operation FLOOD ASSIST 22, which saw our personnel deploy to Byron Bay and Lismore to support the flood affected civilian communities.



EDD - QLD Maritime Museum Training

3RD COMBAT ENGINEER REGIMENT

Foreword

LTCOL Ken Golder, CSC and WO1 Michael Smith

The 3rd Combat Engineer Regiment (3 CER) has had an outstanding year, in this our 30th anniversary year. From support to OP FLOOD ASSIST at the beginning, support to Sea Series, Bde Warfighter exercises, unit 30th birthday, Live Fire Manoeuvre exercises, PNGDF and Ex PUK PUK at the end, it has been another highly rewarding year as part Army's contingency brigade. On behalf of the RSM and I, a shout out to the hard work and dedication of the members and their families of 3 CER.

The standard start to the year was interrupted with a local outbreak of COVID-19 in early February. Not long after, and in response to the significant weather events in Northern NSW, a detachment from 16th Combat Engineer Squadron (16 CE Sqn), Combat Rescue Troop and Construction Troop deployed on OP FLOOD ASSIST with 1 RAR. Not long after, Mobile Training Team - A, consisting of an Engineer Troop from 18th Combat Engineer Squadron (18 CE Sqn) were deployed to Papua New Guinea for three months. Their focus was to enhance the search capability of the PNGDF Engineer Battalion in the lead up to the Papua New Guinea national elections.

EX DINGO FURY, typically the first major activity for the unit, saw the remaining elements of the Regiment undertake High Risk Search, Demolitions and Breaching, and horizontal and vertical construction tasks as part of the brigade's ATL/S 3 progression map. The Regiment was able to reinforce, and in some areas catch up on training that was missed or disrupted over the COVID-19 effected period.



Members from 3 CER that supported OP FLOOD ASSIST

After some well-earned rest over Easter, and elements of the Regiment marching along the Strand for ANZAC Day, 18 CE Squadron hit the ground running in their first commitment with the 3 RAR Battle Group in Ex BROLGA RUN. The Exercise saw each Engineer Troop within 18 CE Sqn support Combat Teams (CT) executing mobility and counter-mobility tasks. It also saw 16 CE Sqn reinforce 18 CE Sqn on the exercise and provide an Engineer Troop to support the OPFOR – 2 CAV Regt, and Regimental HQ deploy in support of Brigade HQ. A significant achievement for the Regiment in this combined arms exercise was the

deployment and employment of the Regiment's Dry Support Bridge in support of the tactical exercise. Over 100 vehicles of the brigade traversed the bridge over the exercise period.



3 CER, Specialist Troop DSB Section build in support of Ex BROGLA RUN 2022

This combined arms warfighting training exercise enabled junior commanders of the Regiment to develop their understanding of task organised teams and the critical nature of engineer support to manoeuvre call signs.



3 CER Bridging Precinct capable of supporting MGB and DSB training

The beginning of June also saw 16 CE Squadron concentrate for Exercise Sea Explorer and subsequently Sea Raider and throughout this period 25 Support Squadron commenced their Trade Courses and completed the 3 CER Bridging Precinct. This is a significant capability enhancement that allows the Regiment to conduct MGB and DSB builds within the unit.

Additional deployments the Regiment supported throughout 2022 include an Engineer Section from 16 CE Sqn that headed to Hawaii supporting 1 RAR for the

Rim of the Pacific Exercise (or Ex RIMPAC) and Indo-Pacific Endeavour. 16 CE Sqn also supported Mobile Training Team - C, which saw an Engineer Troop (-) deploy to Papua New Guinea for three months to support the delivery of an PNGDF Engineer subject 4 for CPL course, conduct reciprocal training and support Ex PUK PUK. 18 CE Sqn also deployed an

Engineer Section in support of 3 RAR to the Philippines for a Joint Australian Training Team – Philippines rotation. Finally, a detachment from Combat Rescue Troop deployed on Ex HELICON LUK to Papua New Guinea in support of Army's Aviation Brigade high altitude training. The same detachment also deployed on Indo-Pacific Endeavour supporting the 1st Aviation Regiment by providing a fly away Combat Rescue capability.



CO 3 CER, LTCOL Ken Golder reviews the Parade with LTGEN Gillespie and BRIG Fegan

On the 19 August 2022, the Regiment celebrated its 30th anniversary. To celebrate the milestone, the Regiment held a parade for friends, family, alumni of the Regiment and invited guests. Former Chief of Army, and the very first Commanding Officer of the Regiment in 1992, LTGEN Ken Gillespie was the Reviewing Officer for the parade. In addition to the parade, the Regiment formally opened the Regimental Memorial and held an Anniversary Ball on the night of the parade. This saw members of the Regiment, their families, NQ Sapper's Association, alumni and invited guests enjoy each other's company and celebrate the accomplishments of the Regiment.

Just prior to the Regimental Birthday week, the Regiment held the annual 3 CER NQ Legacy fishing competition. For a small donation, soldiers were able to spend four days trying to catch fish and win a prize. NQ Legacy remains the unit charity and the event was another outstanding success. The unit was able to raise \$13,500 to support the great work NQ Legacy does in support of veteran families. , We should also point out that we were able to retain the Watson's Challenge trophy again, having taken the win against the 3rd Combat Signals Regiment in the annual 3 CER – 3 CSR Watson's Challenge.

The final ATL/S 5 progression for the Brigade was the Live Fire Manoeuvre Exercise – Ex BROLGA SPRINT. 18 CE Sqn participated in EX BROLGA SPRINT supporting 2 CAV's Tank and Lav squadrons, 4th Regiment's Guns and element of 3 RAR. Sappers had the opportunity to undergo tank inoculation, with a troop of tanks firing their 120mm main armament, .50 cal and 7.62mm coax weapons simultaneously. They also experienced live fire artillery fire missions, including air burst missions on exposed targets. This enabled sappers to build confidence working in combined arms teams. Not to be out done, 18 CE Sqn conducted route clearance, with mines that were designed and 3D printed within the unit. They conducted live fire demolitions to blow in place the mines. Live fire demolitions, as part of the combined arms breach, were also used to facilitate the breach of tetrahedrons and enable tanks to break in and assault the position.



Sappers from Australia, the United Kingdom and Papua New Guinea review construction plans

Throughout the year 25 SPT SQN has been working towards the execution of Ex PUK PUK, which is part of the 3rd Brigade's contribution to EX OLGETTA WARRIOR – Army's principle engagement with the PNGDF. While in PNG, our Sappers were able to live, work and learn from UK and PNGDF Engineers. This year Ex PUK PUK focused on construction works within Goldie River Training Deport and support to the PNGDF Field Engineer Wing. This combined activity is a continuation of the bonds previously

established on previous largescale international exercises held in the Indo-Pacific.

The final Exercise for the year, and the last of the Dingo series exercises, was completed in late October, Exercise Dingo Raider. A watermanship exercise that focussed on MGB builds in the new 3 CER bridging precinct, BEPB qualifications, and Improved Ribbon Bridge

activities. Exercise Dingo Raider was a great opportunity for the Sapper's of the Regiment to focus on some Specialist Engineer skills that are not frequently executed.

The completion of Exercise Dingo Raider saw the closing of the Regimental formal training calendar and the preparations of the Regimental HOTO period. This year we have completed the Vann Cup, the Soldiers Luncheon, 3 CER Christmas Party and St Barbara's Day competition with 4th Regiment,. These activities provided the Unit time to recuperate and regenerate as we step into a TALISMAN SABRE training year in 2023.

As we move into readying ourselves for the high risk weather season, I would like to take this opportunity to thank the members, but most importantly the families of the Regiment. The support you have provided the Regiment and the dedication you have shown has enabled us to achieve phenomenal things in our brigade, our community and our region. Equally, it is fitting to acknowledge the support the Corps has provided us, without this we would not be who we are today. The RSM and I remain commitment to ensuring we provide the opportunity for the Regiment to excel as we move into 2023. We wish you all the very best.

16th Combat Engineer Squadron

MAJ Hugh McKeown & WO2 Benn Goodall

2022 was a unique year for 16th Combat Engineer Squadron. After the Squadron's road to ready in 2021, we were now faced with not a single Main Effort, but numerous Supporting Efforts while holding the torch as the 3rd Combat Engineer Regiment's Contingency Force. The year started with Exercise Phoenix Crawl... being torpedoed by a snap COVID-19 outbreak. The Squadron quickly shifted towards Exercise Dingo Fury... which was delayed by a substantial heatwave. And on the eve of the Squadron stepping up to Townsville Field Training Area... we were recalled to deploy on Operation Flood Assist 22 in Northern New South Wales.

From flash to bang the Squadron was out the door and on the road within 72 hours of recall.



Sappers from 16 CE Sqn under Task Group Coral clean up the streets on OP FLOOD ASSIST 22

Arriving at Evans Head Airfield, the Squadron under, 1 RAR, formed Joint Task Element 12.4 with the addition of radar operators and stokers from HMAS Stalwart, and tradesman and plant operators from No. 65 Squadron RAAF. While the Infantry Companies concentrated on the rural centres of Coraki, Woodburn and Broadwater, the Engineers got dirty with the moving of the numerous mountains of waste from these centres, the connecting roads, and everywhere between. This saw junior commanders teaming up, and in some cases even leading the recovery with council, contractors, the Rural Fire Service and any Good Samaritan with a truck.

Shortly after the Task Unit's arrival it was clear that the engineers would also be needed to maintain access to and from the camp itself at Evans Head Airfield, seeing the Support Troop working hard to build and maintain a road for all vehicles of the Task Unit. The flood recovery efforts were unfortunately put on hold with further severe rain on the way. On 28 March, 16 Troop deployed to Lismore in support of 7 RAR and the State Emergency Service to support the community in preparation, response and any evacuations required. The



Sappers from 16 CE Sqn conduct a first light insertion over water on Ex Phoenix Raider

Engineers, to their credit, demonstrated to 7 RAR what the Q in QRF stood for. In total it was estimated that the Squadron removed 6017 m3 or 547 truckloads of waste from the communities of the Richmond Valley.

The Squadron returned to Townville in good order just in time for Easter and the School Holidays, but with all planning for quarter two decimated by the floods, some 'sappernuity' was required by both the Section and Troop Commanders to make up the training lost from Exercise Dingo Fury. Ex Phoenix Raider was the first Squadron exercise with the first component at Cowley Beach launching Zodiacs from 35th Water Transport Squadron LCM-8s and exploring the nearby islands. The second component concluded with a 22 km dawn amphibious insertion into Cape Cleveland from Ross Island to undertake a route search task with Electronic Counter-Measures and Explosive Detection Dogs.

Exercise Phoenix Mercury was next, building on Explosive Hazard Reduction techniques and the challenges of employing Electronic Counter-Measures and radio communications within an urban environment. The Squadron deployed across Townsville to a number of off-base locations, culminating with a High Risk Search mission at Pimlico TAFE. The Squadron again had a quick break before launching into Exercise Brolga Run with the commensurate 15 Troop supporting Battlegroup Kapyong under 18th Combat Engineer Squadron; and the resourcefully 16 Troop supporting Battlegroup Eagle as the opposing force. Nothing much

can be said at all about Engineers doing anything on Brolga Run so... two weeks later the Squadron regrouped and joined the rest of the Regiment in the Legacy fishing competition and celebrating the Regiment's birthday.

The remainder of the year saw the Squadron pulled apart like a roast chook



Sappers from 3 CER search an abandoned vehicle as part of Ex Phoenix Olympics near Alligator Creek

with 5 Section heading to Hawaii for Rim of the Pacific Exercise (RIMPAC); 3 Section supporting Sea Explorer, Sea Raider and then Indo-Pacific Endeavour (IPE); 2 Section support the set-up of the Brigade live fire exercise; support to the Joint Australian Training Team - Philippines (JATT-P); and 16 Troop Headquarters with 1 Section deploying on Mentoring and Training Team - Charlie (MTT-C) in Papua New Guinea. The Squadron was able to muster one last Exercise for 2022 with the 18th Combat Engineer Squadron, Phoenix Olympics, which included a rural area search and a very informative community engagement task within the township of Alligator Creek.

From all the members of 16th Combat Engineer Squadron we would like to farewell and wish good luck to those members leaving the Regiment; Lieutenants Ernst and Pearce; Sergeants Pritchard and Lucas; Corporals Carroll and Van Moolenbroek; and Sappers Laurie and McCarthy. As we welcome the future Officer Commanding, MAJ Stephanie Sheldon, I know that the 16th Combat Engineer Squadron will continue to be a very busy sub-unit, but the Sappers, Non-Commission Officers, and Officers will continue to make it one of the best teams within the Australian Army. With setbacks, disruptions, a short-notice deployment and a number of Supporting Efforts across the Regiment and Brigade, all the men and women of the 16th Combat Engineer Squadron should be arguably proud of their efforts this year.

18th Combat Engineer Squadron

MAJ Tom Wickham and SGT Phil Managrave

2022 was seemingly destined to be a journey for 18 CE SQN when all the best laid plans for the start to the year were tossed aside by an over-governed COVID outbreak, an over-sold heatwave, and a very much under-accounted-for piece of night fighting equipment which manifested in an incident known as 'LAID-Gate'. The benefit being that 18 CE SQN became certified in ATL5 Search Operations and took the most complete and happiest SQN Photo in regimental history when the item was finally located.

While it was an emotionally scarring activity for all involved, it was beneficial for the Squadron to complete some resilience training early in the year before embarking on a brutal night time CBRN activity at JCU and a short, but un-diminished EX DINGO FURY in TFTA



Sappers from 18 CE Sqn tested their Stage-3 fighting pits against 4 REGT live fire.

while 23 TP enjoyed an exercise in PNG and our sister Squadron was deployed to OP FLOOD ASSIST.

After celebrating a rainy ANZAC Day throughout the region 22 TP deployed on EX EAGLE RUN 22, performing to an excellent standard and winning praise for their use of the much-maligned Stanley Power Pack and equipment husbandry of their APCs. It was yet another ill-fated journey though as heavy rains banished BG EAGLE from the training area and the team spent a hellish night in the most flooded leaguer in history.

In June the Squadron deployed on EX KAPYONG WARRIOR in TFTA then EX THUNDER RAGE/CHAU PHA 22 where we supported 4 REGT live firing activity by establishing a dugin position in the Impact Sector. 21 and 22 TPs observed the position (OBJ KOMODO) be destroyed by indirect fire in style with the Sappers entering the Observer hides with gas cookers and pancake mix to watch the show. Once done it was 21 TPs turn to breach the obstacle belt with explosives and open a lane for an assault force. Working with 4 REGT was a fantastic experience for the team as 130 rounds of High Explosive makes light work of DAMCON for a platoon sized position.

Those activities were really just the beginning, and in July the Squadron, reinforced by 16 CE SQN deployed with BG KAPYONG on EX BROLGA RUN 22. It involved a lot of driving in Charters Towers, recovering broken-down infantry APCs, acting as infantry for Tanks, and breaching an obstacle with no OBSTINT and half the required assets. While it was certainly frustrating at stages, it was an excellent learning opportunity for the junior leaders of the squadron to observe the importance of Time Past Point calculations and the frankly amazing capabilities of the EDD G-Wagon.

After returning unspent ammunition and quickly reorganising the Squadron, 22 and 23 TP deployed in August on EX BROLGA SPRINT while 21 TP reinforced both, and the JATT-P contingent departed to the Philippines.



Sappers from 18 CE Sqn following the completion of Ex Brolga Sprint

EX BROLGA SPRINT was the antithesis of its predecessor. A soothing balm for the aggravation and chafe from EX BROLGA RUN, the Live Fire activity was actually planned, had a clear direction and freedom for the Section Commanders to really take their Sappers out and train. It became a recurring theme that A Coy would be recalled from every

field training exercise, and so it was again in BROLGA SPRINT 22. It left 22 TP as an effective Giga-troop, supporting two tank troops with ENG SECTs and also forming a dedicated Breach Force.

It was the perfect end to warfighting training in 2022 with 2 CAV REGT proving to be the best training partner; designing the battle run to create relevant scenarios that forced the

team to use Combined Arms solutions to the problems. A masterful 'Come-On' booby trap set specifically for tanks was a highlight for the SQN HQ of T3, and SGT Caldwell won the easiest bet of his life with OC 18 when the Tank plough drove around the minefield before ploughing the ground. Honourable mention goes to LT Tracey and Sapper Renwick for sending the ENGR Safety Vehicle track as far off the road wheels as possible in the Dry rehearsal.

In all, the main activities for the year were wrapped up with the team having learned valuable lessons along the way. Some easily, some less so.

Specific thanks must be given to the members of the Squadron and Regiment who volunteered their personal time to do the thankless, behind the scenes jobs that make all the training possible.

Our FRT, led by CPL Fraser have been doing a fantastic job and helping us all learn along the way. CPL de Havilland has worked hard all year to keep the Squadron on-track and literally 'On Tracks' by instructing on virtually every 3 RAR drivers course conducted in 2022.

Our Sappers who volunteer their time to help the Sappers association, give presentations at schools for ANZAC Day and the Women in STEM events have the sincere thanks of their mates and those they set out to assist.

Our junior members who volunteered at very late notice to perform the thankless job of Range Sentry for the live fire are duly appreciated by the rest of the squadron, without their help, there is no live fire.

And finally, to those who have toiled all year in the 3 CER coffee shop, Bailey Whitbread, Liam Kelly, Jordan Catherall, Riley Black what you do really makes a difference. It's painful work that isn't as exciting as the best parts of being a Sapper, but it has a genuinely huge effect for the rest of the Regiment.

25th Support Squadron

MAJ Scot Atkinson and WO2 James Thomas

2022 has been another year of challenges for our Premier Combat Engineer Regiment's Clydesdale Squadron. The Hero Squadron has been charging forward through a year of change for many of our capabilities and of reigniting long standing partnerships within our near region.

Combat Rescue Troop has taken steps towards transitioning from Emergency Responders with LT Thomas Butson and CPL Ethan Schwager. This year has seen the



Combat Rescue operators conduct hoist training with MRH-90 from the 5th Aviation Regiment.

start of a long and uncertain journey to become Army's extract and recover capability. The Troop supported Operation Flood Assist, Exercise Vigilant Scimitar and Exercise Helicon Luk in Papua New Guinea with 6 Brigade. New capabilities have been pursued with the Tactical Rope Rescue Course in the Blue Mountains throughout the year, with continued development of theory and localised training in support. The team will continue to pursue this capability with LT Ellen Rosengreen and CPL Ethan Schwager in 2023.



An M1A1 from 2 CAV crosses a Dry Support Bridge emplaced by 3 CER on Ex Brolga Run

Specialist Troop continued to hold key capabilities to support the Brigade, community, and our near region with LT Ryan Bartley. This year has seen the road to building a Dry Support Bridge capability with tactical implementation during Exercise Brolga Run under CPL Wade Newcombe. I would like to thank 2 CER and SME for executing courses critical to completing the lengthy qualification requirements. The Troop has also formed an

integral element to our partnership with the Papua New Guinea Defence Force and Royal Engineers during Exercise Puk Puk 2022. Our leading Explosive Detection Dog capability has continued to drive integration with the Combat Engineer Squadrons whilst concurrently integrating with the community in preparation for white role search. The excellent leadership of CPL Chris Latimer continues to drive this capability. Finally, water purification has continued to remain Ready with LCPL Corey Peters. The Troop will continue to pursue specialist support under LT Jacob Mclean in 2023.

Construction Troop hit the ground running in 2022 under LT Jacob Mclean and SGT Todd Snowden. The bridging precinct plans developed by the team in 2021 afforded exposure to projects including retaining walls, route remediation, and bridging pads at LCTA and MSTA. For LCPL Lafferty and LCPL Booth this was critical exposure for their trade foreman skills.



Construction Troop establishing bridge abutments for the 3 CER Bridging Precinct to support MGB and DSB training.

The Troop supported Operation Flood Assist with the largest contribution of plant under SGT Todd Snowden and CPL Anthony Adams. SPR Dean Ridgeway enabled multiple heavy transport tasks for the Brigade and Regiment following the retirement of our reliable S-line's and inception of the HX-81. CPL Anthony Adams and SPR Ryan Bell reinforced plant courses in Lae for MTT-B. SPR Coombes supported multiple Regimental driving courses to support and enhance the Regiments capability. LCPL Zac Micallef, LCPL Luke Phillips, and SPR Damon Ashforth led the charge for trade works reconnaissance and execution on Exercise Puk Puk 2023 held at Goldie River Training Depot. CPL Dillon Butler, SPR Lane Carswell, and SPR Raimee Brook, took the lead in November for reconnaissance of the 2023 Exercise Puk Puk location. The Troop is in good hands for 2023 under LT Oliver Phillips and SGT Todd Snowden.

Thank you to the unwavering and critical support of the SSM, WO2 James Thomas for his excellent guidance and mentoring of the Squadron in 2022. I would also like to thank CAPT Lara Perkovic as the lead planner for Ex Puk Puk and LT Morgan Emmett holding the Squadron Operations throughout the year. SGT Timothy Kusters has excelled in 2022 with support to Ex Puk Puk and the Regiment transport capability, and WO2 Maurice Shephard with CPL James Latham, PTE Nicholas Black, PTE Heather Mcleod, and PTE Timothy Veitch has ensured equipment remained Ready whilst also logistically capable as a Squadron deployed to Papua New Guinea.



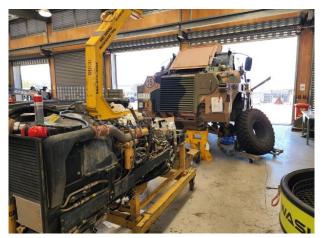
The Contingent for Ex Puk Puk 22, comprised of ADF, UK Royal Engineers, and PNGDF Engineers

Finally, thank you to the 25th Support Squadron for a grand 2022 reigniting partnerships abroad, generating new capabilities, and professionally upholding the engineer reputation. Ubique.

Operational Support Squadron

MAJ David Vagg and WO2 Eron Sage

2022 has once again provided a highly challenging year for Operational Support Squadron (OSS). Fortunately, personnel were able to have a largely uninterrupted Christmas break and were ready for the challenge. OSS personnel started the year keen to contribute logistic



Technical Support Troop conducting maintenance on one of the REGT's PMV fleet

support to the Regiment as it sought to remediate training shortfalls carried over from 2020 and 2021 COVID-19 impacted training periods. Unfortunately, an increase in COVID-19 impacted the induction period resulting in most of the workforce completing force preservation training from their homes. This, combined with February providing a heat wave in Townsville and flooding in South-East Queensland and Northern New South Wales meant first quarter training was heavily disrupted. However, as is our way, plans were revised, force elements were deployed, and we got on with business.

Despite the challenges of completing the induction and integration period via distance learning, new personnel were supported in establishing themselves in the workplace. A key issue in 2021 was a lack of personnel in middle and upper management roles, particularly in the Main Q store. With this resolved for 2022, the Squadron was better prepared to support operations and maintain governance compliance.

The first key activity for 2022 was Exercise Dingo Fury. This is the Regt level ATL 1-3 exercise that reinforces soldier skills and develops small team operation. The overall goal for OSS being the revision and practice of logistic support tasks to the Regiment while operating in a field environment. Unfortunately, due to the heat wave that affected the Townsville region, and an adjustment to the exercise construct, OSS's participation in the field training exercise was greatly reduced. This resulted in a smaller force element deploying to the Townsville Field Training Area (TFTA). OSS led the deployment to TFTA, establishing critical logistic effects to enable remaining unit elements to deploy. The initial focus was preparation for the issue of combat supplies to the engineer squadrons to enable establishment and the commencement of training. OSS training for the Exercise focused on all-Corps soldier skills and achieving ATLS 3C for Logistic Troop and Technical Support Troop. OSS were able to achieve multiple serials that confirmed SOPs for Forward Repair Team deployments and Linear Distribution Points, as well as revising and practicing the requirements for vehicle convoys on public roads using Land 121 vehicles. Although the heat greatly impacted the exercise it still provided worthwhile training outcomes for the Squadron.

Concurrent to Ex Dingo Fury, the 3 BDE Ready Battle Group (RBG) was stood to in preparation to support OP Flood Assist 22. 3 CER were online as the Brigade's High Risk Weather Season (HRWS) Contingency Force Element (CONFE) along with forming the engineer component of the RBG. As the floods started to worsen in the South-East Queensland/ Northern New South Wales area, all facets of the Army were called upon for assistance. When the RBG was tasked, 3 CER were ready and a Squadron sized Engineer Element was sent south with the RBG to Evans Head to provide aid and assistance to the local community. OSS provided a Forward Repair Team (FRT) comprising of two VMs, a TECH ELEC and a FITTARM to support the 3 CER element. The FRT integrated quickly into

the force and immediately began assisting relief tasks where necessary. Then FRT performed maintenance and repair on a range of engineering vehicles while also providing support to local civilians when the need arose. Overall, the OSS commitment performed very well and we are very proud of the support they provided to the local community.

In May OSS soldiers were provided the opportunity to conduct specialist training courses external to Defence through the conduct of Exercise Atlas Warrior. This included certificates and licences unable to be obtained internally. The courses conducted were gas decanting, senior first aid, high risk work licence and confined space to name a few. Soldiers valued the opportunity to engage with external service providers and learn some valuable skills to enable their daily roles.



3 CER OSS had the opportunity to conduct training alongside 35 Water Transport Squadron on Ex Atlas Rage at Cowley Beach Training Area

To enhance the exercise OSS leveraged off 35 Water Transport Squadron (35 WTS) and 16th Combat Engineer Squadron (16 CE SQN) to conduct combined amphibious tasks and training. OSS personnel had the opportunity to conduct basic wet and dry exercise rehearsals with 35 Water Transport Squadron, including the conduct of vehicle embarkation and disembarkation training. This training was of mutual benefit, providing exposure for OSS personnel, while supporting 35 WTS training objectives. Concurrently, members of OSS were also conducting watermanship tasks with members of 16 CE SQN utilising the zodiacs and OBMs to perform drills. OSS challenged 16 CE SQN to a volleyball competition as a

Upon conclusion of Ex Atlas Warrior, OSS conducted Ex Atlas Ranger, which included a range of live fire activities achieving RP3A, section defence range, sneaker range and providing the ability to utilise current night fighting equipment. This was combined with all-corps skills training supported by the Regiment Recon Section and harbour drills.

A highlight for the year was the conduct of Ex Atlas Rage at the Cowley Beach Training Area, with a focus on conducting ATL-3 logistics tasks in the field and training in amphibious environments.



3 CER OSS supported the emplacement of a DSB on Ex Brolga Run with a specialised forward repair team

closing activity and were pleased to walk away with the win.

The OSS commitment to BDE War Fighter Exercise this year was integral to the delivery of Defence's new mobility enabling asset. For the first time 3 CER were utilising the Dry Support Bridge (DSB) on a major combined arms exercise. In the lead up to the exercise OSS ensured safe delivery of the asset to the Regt, then through tireless work by TST, ensured it would be ready for deployment on exercise. Early in the year TST qualified a few VMs as DSB maintainers who were prepared to form a FRT with the necessary tooling and parts required to repair the DSB if required. The efforts of the FRT during BDE war fighter enabled the Engineering Element to successful deploy the DSB for follow on actions within the Battle Group in support of BDE training objectives.

The remainder of the year has seen OSS focus heavily on enabling the Regiment to complete training activities and logistic governance remediation. Personnel working in OSS are required to maintain a wide and varied equipment fleet that contains a large quantity of aging and legacy equipment. Staff vacancies have required personnel to maintain a high rate of effort, a challenge which they rose to meet. The unit undertook Tier 1 auditing in August which identified areas for improvement, while giving a largely satisfactory result.

As OSS progresses towards Christmas, personnel are focused on Tier 1 audit remediation, preparation for Tier 2 and 3 audits, and finalising preparation for the HRWS. OSS personnel are postured to support the Engineer Task Group in the response to Humanitarian Assistance and Disaster Relief within the local region. In 2023 the unit remains READY in support of 3 BDE which will see OSS contribute to combined arms training and operational contingencies.

MAJ David Vagg and WO2 Eron Sage left the Unit at the end of the year having completed their tenure as OC and SSM OSS. They have been proud to lead the personnel in OSS who have performed to an exceptional standard in 2022. Despite a small workforce, they have continuously maintained the Unit among the best in the BDE for maintenance and supply chain performance. At the end of this year, MAJ Vagg and WO2 Sage handed over to MAJ Kevin Moran on promotion and WO2 Jason Ballard. It is hoped they enjoy their roles in OSS leading a keen and capable workforce in support of Engineer Operations.

3 CER 30th Anniversary Birthday Week

WO1 Michael Smith (RSM 3 CER)

The Regiment celebrated 30 years since it had been raised from the 18th Field Squadron. 3 CER's birthday week consisted of Watsons Challenge, the Legacy Fishing Competition, parade practice, opening of the 3 CER memorial, a Professional Military Education (PME) session with LTGEN Gillespie, the parade and the ball.



3 CER took out the Watsons Challenge Trophy again this year, outclassing the 3rd Combat Signals Regiment

The celebration started with Watsons challenge, being held the week prior at the 3rd Combat Signals Regiment (3CSR). During this challenge there were a variety of physical tasks, some

requiring attrition and strength while others such as the egg and spoon race required focus. The sportsmanship was fair and there was no banter between the regiments. At the conclusion of the event 3 CER and 3 CSR met at the CSR boozer for a BBQ lunch, a few ice cold beverages and live entertainment from the 1 RAR band. CO 3CSR had the pleasure of announcing that 3 CER had won the competition.

Next up was the Legacy Fishing Competition. With members being offered a four day weekend for a \$30 donation to legacy. Everyone took the four days off work bar the CO and OPSO who enjoyed practicing calling and executing drill movements on 4 REGT's parade ground. The catch for the whole of the regiment was over 52m of fish, which were all released. The presentation occurred on the Thursday of Birthday week with the CO able to donate \$13,500 to Legacy on behalf of the regiment, he was also able to present a wide range of fishing and camping prizes to members who had won in various categories.



The 3 CER Unit Memorial was officially opened on 18 Aug 22 by LTGEN (Ret'd) Kenneth Gillespie AC, DSC, CSM

Of significance; this week also witnessed the opening of the unit memorial. The unit memorial was first proposed by CPL Chris Latimer of the EDD section. After extensive groundwork and investigation for funding the matter was brought before the CO for approval. Over the preceding weeks the unit members were engaged to produce a memorial design. Seven designs were put forward, before a final concept was decided upon which

included elements from each submission. Construction commenced on 4 Jul 22, and the memorial officially opened on 18 Aug 22 by LTGEN (Ret'd) Kenneth Gillespie AC, DSC, CSM assisted by the youngest member of the unit, SPR August Schaafsma providing a link between the oldest member of the unit to the newest.

The pillar at the peak of the triangle contains a time capsule containing a number of unit artefacts, which in turn will hopefully be historically significant and tell a story of the unit and its people at this time.

Importantly, the memorial exists to recognise all members of the unit regardless of rank, corps or trade. The memorial incorporates a number of key design features central to the Regiment.

All members of the Regiment were invited for the opening of the 3 CER memorial. The CO and the youngest member of the Regiment cut the ribbon and officially opened the memorial. The memorial consists of three pillars representing 3 CER. Plaques of unit members that have passed away while serving will be placed on these pillars. At the conclusion of the memorial opening, officers of the Regiment were invited to attend a PME session with LTGEN Gillespie and BRIG Hoskin at Barry's Place.

This generated some interesting discussion surrounding the relationship between officers and soldiers, Combat Engineer Regiments and numerous career pathways that are available in Army.



CO 3 CER escorts the parade reviewing officer, LTGEN (Ret'd) Ken Gillespie AC, DSC, CSM, past the Corps Banner

The 3rd Combat Engineer Regiment celebrated their 30th Anniversary on 19 Aug 22 with a Regimental parade.

Hosted by BRIG Fegan, DSC, Commander of the 3rd Brigade and reviewed by LTGEN (Ret'd) Ken Gillespie AC, DSC, CSM, the Regiment comprised of two divisions and supported by the 1RAR Band, paraded the RAE Sovereigns Banner. Sadly it was the last time that the Banner would be on parade under the awarding Monarch.

Along with the attendance of the

Townsville Mayor, Cr Jenny Hill, other notable attendees included BRIG Michael Say, DSM Commander 7th Brigade and RAE Head of Corps, WO1 Matthew Dickson the RAE RSM and a host of former Commanding Officers and Regimental Sergeant Majors.

Of particular note was the formation of a Lazy-E from three ranks, where the regiment fired three volleys to a musical compliment in recognition of the occasion. After which the Regiment reformed three ranks. The last time this manoeuvre was conducted on a parade was during the RAE Centenary Parade at the Moorebank SME in 2002.

Presentations were limited to the promotion of Woolly the 6th to the rank of CPL, and the presentation of a 1st bar to the DLSM for 20 years' service awarded to WO2 Spencer Wolfe.

The 30th anniversary ball was a great opportunity for members to consume chardonnay and cut some shapes on the dance floor. Entertainment was provided by the 1 RAR band, who were exceptional and continued to facilitate an enjoyable atmosphere. The alternate entertainment was women in golden winged dresses, who were creating an interesting environment for members who brought their partners. It was an enjoyable night for all, and deemed a success as less than half of the regiment was removed by security.

The Regiment is looking forward to its 31st Birthday. More to follow. Wait out.

Steele Cup 2022

LCPL Joshua Shaxson

Steele Cup 22 was a strenuous 72hrs activity, conducted a SME, where a SECT from, 18 CE Sqn, 3 CER competed against teams from other RAE Units in the race to be crowned the winners of Steele Cup for 2022. The intense competition ran from the 1st to the 3rd of November, but our brutal training regime started many weeks before.



3 CER Sappers conduct care of the battle casualty on Day 2 of the Steele Cup

Weeks out from the competition we started to hone our engineer specific skills focusing on CBRN, Search, Tactical casualty combat care and Impedance to Assault Reduction (ITAR). Over this period, the section formed a great bond and learnt where our shortfalls were.

The first day saw the team wake up at 0430 eager for a 0530 start for a gruelling 90 minute PT session. 3 CER maintained a second place for majority of the workout behind 2 CER, the big muscles on the 2 CER team slowed them down and the boys from Townsville came in with a sprint finish putting them in 1st place.

Post this, the competition saw all teams compete in RP3A where the 3 CER sharp shooters had an average of 163 which was enough to secure 1st place, in the shoot. Big mention to SPR White who earned best shot of the competition.

The afternoon saw the section complete a Chemical Recon and an ITAR scenarios, these stands challenged our skills and we came away from them happy with our efforts and learning a lot.

After a big feed at the famous Holsworthy mess the team were primed for day two. First up for the day was a quick decision exercise where the big brains from 3 CER combined their tactical and ethical decision making to strategise a plan which got us the win in this activity.

A few hours later, the team prepped for a Quick Reaction Force stand, which rolled into a Mass CAS. The training leading up to this event paid off with the section quickly and safely extracting the casualties whilst getting in two contacts with enemy combatants. This was a complex scenario with multiple dangers being shoot and explosive hazard threats, this lead to us getting 2nd just behind 1 CER.

The next challenge we faced was the over water obstacle course, this tested our patience as SPR Palmers fear for heights showed as he sat on one obstacle for upwards of 15 minutes. This was quite the morale booster as we sat and watched on as 6 ESR bantered whilst watching the fearful SPR Palmer navigate his way across the course.

Later that afternoon we were invited into one of the top 7 clubs in the world... the infamous SGT's Mess. We gathered, along with RSM's from across the Corps all were given a 5min window to make a presentation on an issue they think is effecting or important to the Corps.



3 CER Steele Cup team approaching the line, 22 mins ahead of the nearest competition

The 3rd and final day of competition was an arduous 23km scenic paddle along the Georges River. 3 CER pushed hard from the start gaining a promising lead on all other teams. With all the yelling and bickering, we managed to hold onto a commanding lead. The team mentor WO2 Jon Battle joined us for the 3.2km run from Deadman's Creek to the finish line at the Mick Mace Club, he must stopped to tie a boot as he faded away in the last 200m.

It was an awesome way to finish, coming across the line in first place before heading into presentations and being awarded the very gold Steele Cup trophy for our win. All in all the lads learnt a lot and encourage all Sappers to train hard to make it onto the 3 CER team next year.



The 3 CER team took out the 2022 RAE Steele Cup!

3RD FIELD SQUADRON

P&EE Dust Bowl CAPT David Gallasch



MS Troop working on the P&EE Dust Bowl

For many years 3 Fd Sqn Ms Tp has conducted joint tasks and training weekends at the P&EE range. The P&EE range size and proximity to Adelaide offers an ideal location for 3 Fd Sqn Ms Tp to achieve the required training outcomes while completing real tasks for the Joint Proof and Experimental Unit (JPEU) and P&EE range. For ease of providing this support and to improve training it was proposed that a dedicated area is established to conduct training, store

equipment (when not in use) and store materials and plant between consecutive training weekends. This proposal was accepted and over the past 4 month the Ms Tp have developed this area to what it is now – arguably the best 'Dust Bowl' in the Australian Army.

The steps undertaken to get the site to its current stage are as follows:

- Cleared off organic material
- Pegged out the site
- Determined fall. Determined there was 2.5m fall across the area. By allowing 1% fall across the dust bowl we had to conduct a 1m cut and 0.5m fill.
- Levelled area with Dozers and Graders.
- Graded the ring road around the work area and constructed a drain
- Cut bench with excavator.
- Developed a hardstand for storage containers one of which the Tp has commenced modifying into a site office.
- The existing burrow pit was further developed to source suitable clay/rock to develop a track around the training area.
- With the assistance of some FE's constructed a Culvert to ensure tracks would be useable year round.

Future development will include:

- Completion of the site office.
- Upgrading the boundary track.
- Using the area for training courses.

Operators involved in the construction of the 'Dust Bowl' spent a significant amount of time honing their skills as operators and gained a better understanding of civil construction works. This training area will allow 3 Fd Sqn Ms Tp to more easily mobilise and conduct tasks and training at P&EE ensuring operators can maximise plant operation time, boost operators' confidence and deliver an accomplished, capable team and Defence capability for tasks at

the P&EE range and future operations such as natural disasters - floods and fires across the state.



3 Fd Sqn Ms Tp completing works on the P&EE Dust Bowl

Wildfire-and-the-Army

LCPL Tom Jak

In May 2022, I jumped on a plane to Canada after notice from the British Columbia Wildfire Service (BCWS) that my application had been successful for me to attend a training camp to become a wildland firefighter. As a current firefighter with National Parks in South Australia I didn't think that the experience would be too different, but it was.

After passing recruit camp I was posted to Burns Lake in the northwest as a member of a twenty strong unit crew. The following five months we responded to fires across the province that could only be accessed on foot or by helicopter. It has been one of the most rewarding and demanding jobs that I have ever done. I have often been asked what skills and training I have that benefited me and I thought this would be the perfect opportunity to talk about something that many members of the Army Reserve may resonate with. We often talk about the wealth of skills and careers that reservists bring to the Army but not often how many skills and tools the Army has given to people like myself. Following orders and taking direction.

Following orders when I don't understand the bigger picture. Carrying a heavy pack and equipment for kilometres to a fire. Knowing how to "Hurry up and wait" without losing my



3 Fd Sqn members supporting HADR operations

mind. Keeping my kit tight and always ready. Spending literally every waking moment with my crew for weeks. Working as a team. Standing in the rain for hours doing menial work. Laughing till you cry at things that aren't even funny. Crawling out of bed and training when your body says no. Being 5 minutes early to everything.

Sleeping in a tent for weeks without a shower. Recognising the "I love my job!" moments. Being there for your mates in tough moments. Making friends who become your family. Saying "see you next season" but knowing you might never see them again. I even had an issued 'weapon' that was a Pulaski (axe/mattock) that was checked for rust and sharpness daily. These are just a small amount of the 'tools' that I know have allowed me to be a better firefighter. I will always be grateful for the experiences and training the Army has equipped me with to pursue my other goals.

5TH ENGINEER REGIMENT

5 ER began 2022 with a need to address the skill fade that two years of lock down and ESF tasks (fires, floods, COVID general duties, hotel quarantine support, Aged Care assist) had generated and keen to get back to combat and construction engineering. However, in a year where every part of the community was also emerging from lockdown, this was not so simple.

Unit Training

Due to the unknown and unplannable durations of COVID lockdowns, and with 5 ER spread across three different COVID management regimes (ACT, Western Sydney, country NSW), squadrons planned and worked through independent activities to dust off and improve their primary sapper skills.

Over a series of squadron-led weekends, Combat Engineer sub-units re-awoke their minds and hands to the practicalities of individual weapons, CBRND,



Property Clean up during OP NSW FLOOD ASSIST 22
- Lismore

demolitions ranges and basic combat engineering including search, EHR and chainsaw and explosive tree felling.

All squadrons took advantage of qualified personnel to practice their skills on the Combat Marksmanship Continuum and to qualify on less common weapons that were available to them including MAG 58, M4 and pick up CAM qualifications in 40mm, 84mm and claymore.

In late July 2022, 4 Squadron led an explosive tree felling exercise in the Majura Training Area. For three days, Regt members practiced mechanical and explosive tree felling techniques, creating an abatis obstacle on a track, clearing a Helicopter Landing Site and smaller helicopter hoist "canopy holes". This exercise built on extant demolitions skills and enhanced their counter-mobility and survivability capability. Felling both soft and hard woods provided some good learning points, such as a kicker charge placed on a soft wood tree often simply removed the top rather than kicking in the intended direction of fall.

CBRND familiarisation and training occurred throughout the year with a combination of new and legacy equipment and ensured that our sappers understood the drills and that our NCOS and officers could run an effective MTF in preparation for future brigade familiarisation tasks.

101 Construction Sqn qualified three members on the full time Plant Operator course and another five on SSL, thus setting the Regiment up to provide plant support to DOMOPS tasks through the year. They also constructed obstacles and, over two days, removed the complex timber obstacle in the creek that had prevented the use of the Holsworthy Obstacle Course. Their final activity was the planning and construction of a set of concrete stairs at RHQ, laying the foundation for more complex construction tasks in 2023

Inter-unit Training

EX CAMEL 22. After only six days after returning from flood support in Lismore in March, 4 CE Squadron got straight back to foundation warfighting with EX CAMEL 22. (CAMEL - Combined Arms Multi-user depot Exercise - Live) This training activity was conducted with a troop from 4CE Squadron, a platoon from 1/19RNSWR, a troop (-) from 1/15RNSWL, a JOST from 23 Bty, 9 Regt RAA, a signals det from 8 Sig Regt, and a det from 5 CSSB. The task was to conduct a platoon assault through a protective obstacle employing combined arms effects to achieve the principles of SOSRA. This exercise was an enormous experience for junior leaders who had the opportunity to plan their assault from scratch and then execute their plan in a live fire training environment, the field firing range was developed around their plan rather than the other way around.



Back Row L to R, B to F: SPR Peter Ford, PTE Shanice Goiser, SPR Brendan Aitken, SPR Chris Mitchell, SPR Lachlan Spencer; Front Row L to R: SGT Newton Thaiposri, PTE Olivia Buonopane, SPR Ash Carter, SPR Eric Mandl, PTE Jasime De Luna, CPL Jarryd Dickson

5 SQN worked to support 4/3 Royal New South Wales Regiment's (RNSWR)

Readying Cycle as part of EX WARATAH CRAWL, providing a section of Combat Engineers to the activity. Developing defensive works, and providing Mobility support on patrols and during a Company-level breach, this section reaffirmed 4/3 RNSWR's and 5 BDE's appreciation of Engineer support. This appreciation was expanded to 1/15 Royal New South Wales Lancer (RNSWL) where Combat Engineers operating from PMVs provided Mobility Support through route search and Counter Mobility support through (notional) route denial, obstacle integration, and reserve bridge demolitions as part of EX SATTELBERG RUN.

These activities position 5ER to continue to expand it's combined arms skillset and further develop it's professional relationships in 2023.

DOMOPS

A huge year for 5 ER with Joint Task Force 629.1 (NSW) being called out three times this year in support of floods in Lismore and NSW North Coast, Windsor in Sydney's north west and Parkes and Forbes. In each event, 5 ER provided planning and command staff, general duties personnel, combat engineers and plant operators, as required

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In Lismore and Northern NSW, 5 ER led the initial JTF 629.1 support, with Regiment HQ coordinating and leading the on-ground ADF liaison and response, 4 Sqn HQ leading the ESF Sqn reconnoitring access and providing support to the affected towns of Coraki, Woodburn and Broadwater, and a plant team supporting rubbish clearance and consolidation in Lismore and the region.



Explosive and conventional tree felling - Majura Training Area

Personnel from all squadrons provided personnel critical in providing support to communities affected by floods. Sappers focused on Mobility support, providing road access, and working with GDs to remove detritus blocking entry to homes. Working with emergency services, these personnel cleared detritus and ruined household items from affected homes and helped to provide food, water, and shelter to local communities as part of Survivability & Sustainability tasks.

Over the next two weeks, 5 ER, as JTU 629.1.3, managed the tasking of multiple ADF units including sub-units from 6 ESR, 8/9 RAR, 1 AR, 5 Bde (41 RNSWR, 1/15 RNSWL, 4/3 RNSWR), 4 Bde and 9 Bde.

Transfer of Command

December 2022 saw the farewell of LTCOL Robert Tot and welcomes LTCOL Heath Stevens as Commanding Officer.

6TH ENGINEER SUPPORT REGIMENT

Foreword

LTCOL Matthew Dobney and WO1 Graeme Nagle

The 6th Engineer Support Regiment (6 ESR) continues to enable the Joint Force to live, move and fight. From Lismore to Gapuwiyak; and from the Pacific to the Middle East, 6 ESR continues to support known and contingency operations at short notice, both at home and abroad. This has involved a wide range of supporting elements ranging from highly skilled individuals to squadron sized teams, providing tailored specialist engineer capabilities and effects.

On the back of a dynamic couple of years, 2022 saw 6 ESR led the way in several key actions achieving far reaching operational and strategic success. The17th Construction Squadron, under the outstanding leadership of MAJ Don Robertson, successfully delivered Exercise Saunders in Gapuwiyak, Northern Territory, celebrating 25 years of the Army Aboriginal Community Assistance Programme (AACAP). Despite the challenges, the Squadron remained agile, explored innovative construction techniques and most importantly, left a positive mark on the local community through their community focussed exercise design which placed engagement at the heart of all activity.

The 21st Construction Squadron started the year with a domestic deployment, reinforcing the 2nd Division in Lismore in the wake of the devastating and widespread flood disaster. The Squadron acquitted itself admirably and immediately following their return to Zabul Lines, deployed an element to Fiji under JTF 637 to complete the work their sister Squadron began in 2021 – the reconstruction of the Lekutu Secondary School. Ably led by MAJ Ben Kuchel, the Joint Contingent strengthen our regional partnerships by working alongside engineers from the Republic of Fiji Military Forces, New Zealand Defence Force and French Armed Forces of New Caledonia. The remainder of the Squadron back in Australia, conducted training to prepare the Regiment to provide theatre level engineer effects in a persistent threat environment.

The 20th Explosive Ordnance Disposal Squadron continued to deliver high quality training in support of the Joint Force through several International Engagements, Exercise Southern Jackaroo and the Wallaby Series of exercises. MAJ Josh Watson's outstanding leadership has allowed the Squadron train a new class of EOD technicians as well as grow relationships with Defence Science and Technology Group and our Pacific partners including Nauru and the Solomon Islands.

MAJ Braden Theisinger and WO1 'Taff' Hall have skilfully led the charge in the Regimental Works Office, fulfilling duties in the Divisional Engineer cell on multiple 1st Division exercises and as well as maintaining a watchful eye on future Regiment works, setting conditions for significant works in 2023. The works office has also dutifully supported several operations and will continue to do so into 2023.

A special thanks is due to our Operational Support Squadron who enable all of the Regiment's actions. The quiet achievers of the Regiment, often without the chance to observe the outcomes of the activities they enable, their tireless work in support of the wider

Regiment is always critical to the unit's success. Energised by MAJ Russ Haycock's positivity and leadership, the Squadron has been a force multiplier and along with MAJ Marty Raine (Regimental Quartermaster) and WO1 Ian Dale (Artificer Sargent Major), have ruthlessly chased down innovative concepts which have unlocked the potential of the Squadron and increased their already impressive output.

In yet another high tempo year, the Regiment has stood tall and continued to deliver decisive effects for the Joint Force, an achievement which is a testament to the resilience and work ethic of the soldiers and officers of the unit and evidenced by the number of our amazing people officially recognised and commended for their service. On behalf of the RSM and I, we thank you all for your professionalism, commitment and dedication to service which has truly made the difference for our community and the Joint Force. We also would like to acknowledge and thank the family and friends of the unit, for without whom success would not have been possible. Your unwavering support has allowed us to continue doing what we love and has enabled 6 ESR to achieve mission success in uncertain times.

With Strength and Precision.

Regimental Works Office

LT Daniel Wood

This year has seen the Regimental Works team plan, develop and project manage a variety of construction tasks both domestically and abroad.

After completing his drafting course, SPR Joel Hendriks has been utilising his 3D visualisation skills while deployed on Op Accordion. He has been joined by the Works Officer MAJ Braden Theisinger to provide his project management and engineering expertise as the Chief Engineer.

The team has contributed to Op Flood Assist 22-1 and continues to support Ex Saunders (AACAP) with SGT Glen Piper and LCPL Stewart Cox providing their surveying support in Gapuwiyak, NT. While at AACAP they have enabled site set out, horizontal construction tasks as well as documenting the vertical construction task.

The team has been hard at work on the planning and design a of suite of tasks for the Wide Bay Training Area, including the redevelopment of a runway for modern RAAF aircraft. 17 & 21 Construction Squadrons are scheduled to begin construction of the runway in 2023.

17th Construction Squadron

LT Jacob Moscato

17 Construction Squadron (17 CS) endured another high tempo year facing challenges on both an international and domestic scale. Supporting OP TONGA ASSIST, OP FLOOD ASSIST 2022 in Northern NSW, and delivering a successful AACAP in its most remote location to date, 2022 has proven that 17CS is always ready to rise to the occasion.

Operation Tonga Assist. 17 CS detached trade and plant support to 2 CER to supplement their capability in the ADF response to the crisis in Tonga that unfolded in January. 17 CS

assisted in providing humanitarian aid and engineering effects, epitomised in a demonstration of our capability to air mobilise plant equipment (pictured below).



An underslung 450j coordinated by CPL D Tomkins

Operation Flood Assist. With the advent of a whole of government response to the flooding in Northern NSW and SE Queensland, 17 CS was once again called upon to assist in the disaster relief effort. Deploying personnel to both Lismore and Byron Bay, we were able to expediently repair routes, dispose of waste, and assist local governments and contractors.

Exercise Saunders, Gapuwiyak. In May 2022, 17 CS and attachments from across Army deployed to Gapuwiyak in East

Arnhem Land, NT to deliver the 25th year of the AACAP under the 6 ESR-lead EXERCISE SAUNDERS. This would be the culmination of months of planning and stakeholder engagement in the effort to deliver construction, health and training effects underpinned by community engagement. The construction of Camp Birt, a self-sustainable, modular, scalable, 150 man camp was erected to support the participants of EX SAUNDERS over the 6 month duration of the exercise.

This camp also offered an opportunity to test the capability of the new WPDS-Light which has proven to be a highly effective piece of equipment in producing volumes of potable water to sustain the force in the field. 17 CS has been responsible for the delivery of a new Youth

Centre as well as upgrading a key MSR which has the dual purpose of meeting community needs and achieving our own training outcomes. These construction projects have opened the door for the squadron to interface with the community in unique ways, whether through participating in local AFL games, practicing bush medicine or fishing and hunting with locals. AACAP 22 has proven to be a truly unique experience that both the ADF participants and the local community are unlikely to forget.



17 CS tradesmen continue the construction of a Youth Centre for the community of Gapuwiyak as a part of AACAP 22.

20th Explosive Ordnance Disposal Squadron

By MAJ Joshua Watson

2022 has been a very busy but rewarding year for 20 EOD Sqn, which has been focused on a number of overseas activities, centred on OP RENDER SAFE support to Nauru and for the delivery of several EOD Level 2 courses to the Royal Solomon Islands Police Force (RSIPF). OP RENDER SAFE NAURU deserves special notice, however, because for the first time an EOD Sergeant acted as Contingent Commander and led the task from initial inception through to disposal. Brett Hitchins and his team did excellent work, which was very highly spoken of by both AS High Commission personnel and the Government of Nauru.

The work in the Solomon Islands has been equally satisfying – 20 EOD Sqn has been afforded a unique opportunity to lead delivery of newly-designed EOD courses for the RSIPF, with an eye to deliver future training into 2023 and beyond, while also supporting recons to the outer provinces. SGT Rhett Summers, SGT Brent McLean, CPL Nathan Burgess and their teams are to be commended for their hard work on these activities this year.

20 EOD Sqn also had the excellent opportunity to exercise with both Japanese and USMC EOD teams as part of Ex SOUTHERN JACKAROO in Shoalwater Bay. Stemming from a request for IEDD training from the JGSDF, SGT Damian Dickson and his team organised and ran a very comprehensive IEDD training package, ably supported by SSgt Joe Spore and Sgt Tommy Pollaro from USMC EOD. This Exercise has gone a long way to developing relationships that will grow with further training events and OP RENDER SAFE missions into the future.



Australian Army soldier Sergeant Damian Dickson from 20 EOD SQN attaches a pull to an uncovered training Improvised Explosive Device as part of a render safe during Exercise Wallaby Walk at Canungra on 13 June



Australian Army Officer Captain Levi Braund (left) delivers a CONOPS brief to Captain Scott Bowers and Sergeant Thomas George from 20 EOD SQN during Exercise Wallaby Walk at Canungra on 13 June 2022.

On top of a busy operational and IE schedule, 20 EOD Sqn also completed the full suite of the WALLABY-series of Exercises, and delivered the RAE EOD MOD 3 course in conjunction with SOER. Thanks to contemporary EOD examples coming out of Ukraine, training has taken on a more intense and realistic aspect than in previous years. The WALLABY series has also been the vehicle for the Squadron to completely revise the scope and realism of CBRN EOD tasks and training with the excellent support of AHQ, CASG and DSTG.

Finally, 2022 has seen the culmination of many years of work with the official re-raising and equipping of 3 EOD Tp from 31 Oct 22. The addition of the third EOD Troop will provide additional EOD capacity to exercise and cooperate with the Combat Brigades, which has been limited due to operational commitments. Looking forward, 2023 promises to be another busy year, and the opportunities for EOD Technicians and teams to hone and use their skills, both at home and abroad, are continuing to grow every day.

21st Construction Squadron

By MAJ Ben Kuchel, CAPT Joshua Roberts, LT Joshua Bell and LT Julian Salleo

2022 started off with a bang for the 21st Construction Squadron, one month into the year the Squadron deployed as part of the Australian Defence Force response to the Queensland and Northern New South Wales floods to Lismore in Northern New South Wales. Whilst support to Northern New South Wales was ongoing the Squadron started deploying elements to Lekutu, Fiji for the conduct of Construction Engineering Team Phase 2 during which time the Squadron completed the reconstruction of two school buildings destroyed by Tropical Cyclone Yasa in 2020. The deployment to Fiji was followed by Exercise Bailey Run – this included practicing a number of its core tasks in a simulated persistent threat environment. Closing out the year included the preparation of trade specialist teams to support Hari'i Hamituk, Puk Puk and the Vanuatu Government National Emergency Radio Network Phase 3.

Operation Flood Assist 22-1

From March to April, the 21st Construction Squadron supported by elements from across the 6th Engineer Support Regiment deployed to Lismore, NSW as a part of the Whole of Government Response to the February Floods. The tasks undertaken by the Squadron included debris clearance, building damage assessments, restoration of critical infrastructure and trade support. The tasks required members of the Squadron to work alongside Local and State Government officials in addition to the civilian contractors in the region. Combat Engineers conducted waterway surveys in the area for damage and debris. A key



SPR Brayden Taylor (left) and SPR Daniel Coleman (right) are preparing a water pipe to provide clean drinking water, whilst on OP Flood Assist in Lismore NSW. Construction Engineer Team Fiji Phase 2B

achievement for the Squadron was the work done on the Nimbin main water supply. Working with Lismore City Council, the Squadron constructed 3.2km of pipe to reconnect the water supply to the town of Nimbin. All members of 21 Construction Squadron who deployed on OP Flood Assist did an excellent job to help the people of Lismore and the surrounding areas in what was a challenging environment.

From April to August, the Squadron deployed a Construction Engineering Team to Fiji to assist in a whole of

Government effort which was focused around the rebuilding of key infrastructure after many areas were adversely effected due to Cyclone Yasa in 2020. The construction engineering team included participants from the Royal Australian Airforce, Royal Australian Navy, New Zealand Defence Force, French Armed Forces of New Caledonia and the Republic Fiji Military Force. The Team completed two school classroom buildings at the Lekutu Secondary School. The deployment provided valuable experience for all members of the contingent and helped to build relationships between the various partner nations.

Exercise Bailey Run 22

During July, the Squadron completed Exercise Bailey Run where members of the Squadron deployed to Wide Bay to simulate providing engineering support to the joint force in a persistent threat environment. During this Exercise, Resource Troop developed their water purification and engineer search capabilities and 1 Troop with plant support practiced its rapid horizontal construction capability in a post disaster scenario.



The Joint Engineer Construction Contingent in front of the Lekutu Secondary School in Bua Province, Vanua Levu on completion.

Operational Support Squadron

By LT Ryan Newhill

2022 has proven to be a challenging year for 6ESR, with Operational Support Squadron (OSS) providing support to a multitude of complex international and domestic tasks. Amidst

these operational requirements OSS has continued to provide important capability to the Unit, ensuring every task is able to get out of the door successfully.

Operation Fiji Assist

OSS contributed CFN Garnier to OP Tonga Assist, using his crucial Electrical trade skills to support 21CS SQN. Working hard to keep the equipment running and with no-one to handball the problems to, CFN Garnier returned to the unit with a wealth of experience along with an impressive tan.

Operation Flood Assist (OPFA22)

The Operational Support Team (OST) was attached to 21CS and proved vital to sustaining the engineering effects within the affected region, providing integral support to 6ESR while supporting other units in the Lismore area. Operating with constant unknowns and within a flood devastated community, the OST demonstrated ingenuity and tenacity to support the WoG effort in the area. While work lights often burned away into the night at our workshop at the Lismore Bus Depot, our Q-Store members worked tirelessly to build an effective supply system in a time where trailer jockey wheels were being express delivered by CH-47's. OPFA22 also saw several legacy fleet recovery vehicles relied on including 6ESR's own Mack HRV. Often called on short notice for complex tasks, Recovery Mechanic LCPL Dickson and the HRV supported many civilian and ADF elements in dire situations. Shortly after returning from OPFA22, 6ESR OSS farewelled our HRV as the last fully functional HRV in Regular Army.

Exercise Saunders, Gapuwiyak



AACAP 22 OST

Supporting 17CS, the AACAP 22 OST has worked in challenging conditions to sustain and enable the Construction Squadron to achieve the tasks in Gapuwiyak for several months. Responsible for maintaining the WPDS-L during one of the platforms most significant tests, supporting the convoy movements across thousands of kilometres and the company sized engineer vehicle fleet in location, members of the OST have provided a crucial logistic effect and have gained valuable experience working in a remote location. In support of the AACAP effort, the S4

and ASM have notably worked countless hours to plan and coordinate the logistics effect to ensure mission success, proving in fact that logistics does not just happen.

11TH ENGINEER REGIMENT

LTCOL David Patterson, CAPT Lachlan McDonald

104 Construction Squadron

2022 proved to be another demanding year for the 104th Construction Squadron (104CS). Commanded by CAPT Dean Patchett, 104s role is to deliver combat, trade and plant capabilities across the battlefield.

104CS deployed members as part of OP FLOOD ASSIST 22 for a range of skill sets from Technical engineering to plant operators and general duties across the SEQ area. The SQN also provided members for OP COVID-19 ASSIST, OP RESOLUTE TSE 104 and has provided to support to Ex PUK PUK in the PNG. The year has seen the SQN apply their skill sets in both training and on operations. As part of the yearly training activities, the SQN has conducted recon (EX AUSTIN), search (EX PARAPET), demolitions (EX MAGNUM OPUS) and driver training in addition to all corps soldier skills sets.



104 CS member supporting Flood Assist 22

EX AUSTIN enabled practice of reconnaissance and report writing for the SQNs JNCOs on various potential task sites around GBTA. This exercise provided the recon reports utilised as part of EX BUNA ROAD later in the year. The Sqn conducted annual single code plant course to continue the growth of new operators and upskill already coded plant operators. The course had to endure heat waves and flooding; however, it gave the operator great experience in operating in different climates.

Overall the SQN has had a successful year with both the soldiers and officers within the SQN gaining valuable experience in their respective fields of trade.

11 Combat Engineer Squadron

11 Combat Engineer Squadron (11 CES) continues to show the adaptability and resourcefulness of Reserve engineers. The sappers of 11 CES bring an array of civilian qualifications and experience to the Army, with tradespeople, interpreters and even published authors. 11 CES draws on these skills to deliver engineer training opportunities and be ready for emergency tasks.

11 CES members supported multiple Anzac Day ceremonies across Brisbane in 2022. Lieutenant Kiel-Chisholm and Corporal Mulherin from 29 Troop attended Belmont State School and Calamvale Community College respectively to give speeches on the Friday before Anzac Day. On Anzac Day itself, the squadron provided a catafalque party for the Stephens RSL Sub Branch's service in Annerley. The squadron also provided a banner

party to march with the Sapper's Association in Brisbane City, drawing on members of 27 Troop and 28 Troop. Marching with the Sappers Association on Anzac Day is a regular commitment for the squadron and the regiment. As soon as the march concluded, the banner party escaped the unpleasant weather and enjoyed lunch and war stories from former sappers at a local watering hole.



11 CES on EX Parapet

Queensland has faced a number of flooding events this year, with several areas being declared as disaster areas multiple times. Homes, businesses and infrastructure have suffered considerable damage and some communities were pushed to the breaking point. 11 CES contributed personnel to OP FLOOD ASSIST 22-1 in March 2022, responding to the Brisbane "rain bomb". Brisbane was hit with 676.8 mm of rainfall over three days, breaking the previous record of 600.4 mm in 1974. The amount of water dumped by

the rain bomb was roughly 80 percent of the city's annual average rainfall in three days. Personnel assisted with clean up across South East, helping communities recover and rebuild.

EX ARRAS SPRINT occurred in the second half of May, testing the Brigade's ability to raise a force that can rapidly respond to domestic unrest. Personnel search, building search, asset control point and vehicle check point scenarios were run across Toowoomba over the exercise.

However, the activity was disrupted by further flood events. 11 CES and other members of EX ARRAS SPRINT's engineer section quickly refocused and deployed to Laidley to assist with flood clean up. Community members were relieved to see Defence personnel arriving so promptly. After two days of community clean up, sappers returned to EX ARRAS SPRINT to provide engineer support and participate in the concluding activity.

11 CES was fortunate to host not one, not two, but 12 combat engineers from the Republic of Fiji Military Forces (RFMF). Our Pacific brethren were attached to 8/9 RAR and were very keen to see how 11 CES trains for and executes search tasks. The RFMF sappers were given further search training and mentorship under CPL Dunemann of 27 Troop.

The entire episode was the result of a chance encounter. Several Fijian sappers visited RHQ while the RSM and CPL Mulherin were picketing weapons in preparation for Anzac Day ceremonies. The Fijian sappers left with pace-stick happy snaps and a fistful of unit patches.

35 Combat Engineer Squadron

The year of 2022 has seen 35 CES become very active in providing capability to DACC tasking and calls for assistance to civilian authorities. In participation with NQ units 31/42 RQR, 11 CSSB and 141 SIG Sqn, 35 CES has contributed Engineer resources to 3x DACC

1 missing person search tasks, EX MACKAY READY which simulated a DACC 2 scenario in assisting QPS, QFRS and SES in search and rescue operations and Operation Flood Assist 2022. These tasks saw 35 CES employ its plant assets, drone capability and sapper ingenuity to situations that are becoming more regular in occurrence during high risk weather situations.

While the year has required much in the way of civilian assistance there have been some excellent training exercises that have seen combined training between the Townsville based 2 TP and Rockhampton base 3 TP come together. EX PARAPET NTH 22 was conducted in Rockhampton with high-risk search skills being tested to a high degree with great success and EX WALTER PEELER NTH 22 saw the SQN come together again for a range shoot to exercise the foundation warfighting skills with the conduct of RP3a and night shooting serials. There was also the opportunity to provide support to 31/42 RQR during their live fire component of EX JEZZINE FIRES by running BNS serials to enhance the training value to levels beyond most ARES activities.

It was also satisfying to increase 35 CES skill pool through the successful completion of ACP LV1 and LV2, SCE19 and Tree Felling courses that have placed the SQN in an excellent position to enable 11 ER for any future DISFOR and DACC support.



35 CES - Tree Felling Course 2022

12TH CHIEF ENGINEER WORKS

Foreword

LTCOL Jon Pollard and WO1 Darren Parsons

The following speech was made at the re-raising ceremony of the Unit, held 23 Apr 22 at the Unit lines in Gallipoli Barracks, Enoggera.

"On behalf of the Men and Women of the 12th Chief Engineer Works, I would like to extend a warm welcome to Senator Amanda Stoker, the Assistant Minister to the Attorney-General, Assistant Minister for Industrial Relations and Assistant Minister for Women, who is representing the Minister for Defence; the Local Member for Enoggera – Councillor Andrew Wines; MAJGEN Matt Pearse, Commander Forces Command, who is representing the Chief of Army; the Representative Colonel Commandant Royal Australian Engineers— MAJGEN Stephen Day; Royal Australian Engineer Head of Corps & Corps RSM – BRIG Mick Say and WO1 Matt Dickson; Commander 6th BDE and BDE RSM, Brigadier Greg Novak and Warrant Officer Cliff Bell.

I'd also like to welcome past Unit members and their families, especially those who have travelled from many parts of the country to be with us today. And I'd like to welcome the families of our current serving members.

Thank you Padre for your blessing of the Unit, coming off the back of Easter and heading into ANZAC day, I appreciate the time you're able to spend with us today.

I would also like to thank Aaron and Ashley for welcoming us to your traditional lands and I'd like to take a moment to reflect on the notion of connection to country and what it means for 12 CE Works. For us, it isn't only about the connection to this land, being the home of the Unit, but the nature of our work means we share a special connection with many lands. Our men and women work closely with people in their homeland to create infrastructure that will last for many generations. This built environment, which is part of our legacy, becomes part of their land and part of their community.

The Unit's first connection to country can be traced back to the early 1960s where a small group of Australian soldiers based in Papua New Guinea made a big difference. These sappers and their families lived in, and worked with the community, to help build a nation. This group of soldiers came from a Unit which later became our sister Unit, the 19th Chief Engineer Works and established a District Engineer's Office in Popondetta, within the Northern Province of Papua New Guinea. But when 19 CE Works left Popondetta to return to Australia, a group remained. In 1971 they relocated to Mendi assuming responsibility for Public Works for the Southern Highlands District. Although this unit retained the name 'District Engineer's Office', this was the start of what would become the 12th Chief Engineer Works.

The nation building efforts by 12 CE Works in PNG received not only acknowledgement from the Australian Army, by way of a Unit Commendation in 1999, but also importantly, continues to receive acknowledgement from the PNG people, and the PNG Defence Force. When you travel to the area today and when you speak with some of the senior PNG

Defence Force Engineers you're still greeted by people with fond memories of 12 CE Works and the great work that was undertaken many years ago. As relayed to me recently by Steve Noble, who was the last officer commanding of the unit in Mendi, when the Unit disbanded in 1999 and returned to Australia, there was a sense of great pride in the Unit achievements and genuine regret to be leaving.

So let's fast forward to today, the men and women before us are reopening the 12 CE Works history book to add their own chapters. As we expand Army's Construction Project Management capability, we do this with the weight of our predecessor's achievements on our shoulders as we strive to uphold the name that has been forged in Papua New Guinea. We will do this from a Unit home here in Brisbane, and this time we look further afield than Papua New Guinea alone. But just like our forebears, this time we will do this by leveraging a team of teams.

This starts with Team 6. The Brigade that we call home, along with other Units to generate specialist effects to support the Joint Force and Whole of Government Outcomes. We do this with teams from industry, including designers, construction contractors, legal and probity advisors, where our team integrates the right people at the right time to get the job done.

We do this with teams from the total workforce system, which means we draw on the experience of our Army reserve members to supplement the workforce and provide specialist advice at various times throughout projects.



The flag that flew over the 12th Chief Engineer Works in Mendi was re-raised to signify the re-raising of the Unit in Gallipoli Barracks, Brisbane. (L to R) COMD FORCOMD MAJGEN Matt Pearse, CO/CE 12 CE Wks LTCOL Jon Pollard, CPL Ben Corsini and CPL Troy Roseman

And finally, we do this as a team of families, because we need the support of our extended families for any of this to be possible.

It is great to see so many of these team members here this morning, so that we may mark this very special occasion, the re-raising of the 12th Chief Engineer Works."



WO1 Darren Parsons MCs the re-raising ceremony

18 Works Section

CAPT Justin Cross and WO1 Daniel George

2022 has been an important transition year for 18 Works Section, formally becoming part of the establishment of 12th Chief Engineer Works. This has given the section definitive focus, purpose and drive to deliver real benefit for the Papua New Guinea Defence Force and the Papua New Guinea-Australia Partnership.

18 Work Section continued in the closure of the Lombrum Infrastructure Project Early Works Package on Manus Island, and development of accommodation and services upgrades at Moem Barracks, Wewak. New to the portfolio in 2022 was the development of services upgrades at both Goldie River Training Depot, Port Moresby and Igam Barracks, Lae. Travel restrictions significantly eased in 2022, enabling 18 Works Section to invest more in face-to-face engagement and deepen relationships established over a challenging COVID period.

While this is a positive step to reinforce and enhance the excellent work the Section delivers, it is not without sacrifice of the individuals, but more importantly their families. The individual and collective efforts of the team continue to be impressive, emphasising the calibre of

individuals required to deliver infrastructure effects (not just facilities) in the South West Pacific in support of Strategic outcomes.

Lombrum Infrastructure Project

The Early Works package of the Lombrum Infrastructure Project has a twofold purpose. Firstly, to deliver a new medical centre, communications antenna installation, perimeter fence and chapel. Secondly, to pave the way for the Main Works package, currently being delivered by Jacobs.



Lobrum Health Centre Ward

The team, with our partners at Hornibrook and GHD, have been able to achieve both. The medical centre was the last piece of the puzzle, being formally opened and utilised for not only garrison health support, but as is the norm in PNG, community health as well.

The logistical and construction challenges the team has faced continues to provide evidence of just how challenging and remote Manus Island is. It cannot be understated how much influence the location can have on even the simplest

projects. Resolving these challenges has taken significant effort and dedication from many across the team, both in Australia and PNG, with numerous lessons learnt that are being incorporated into future projects in PNG and across the region.

The defect and maintenance period for the medical centre is due to complete in October 2022. The team will remain engaged with the Directorate of Engineers in PNG and the Jacobs Main Works team to ensure the long-term success of the full infrastructure effect on Manus Island.

Moem Barracks Live-In Accommodation Project

The section has been continuing to develop the next iteration of accommodation work on Moem Barracks in Wewak. The project is nuanced to not only satisfy the immediate need for accommodation but also the long term need to improve and sustain underlying services. The procurement of a design and construct contractor for the accommodation was completed in October 2021, with CC Pines Pty Ltd being awarded the two phase contract to

design and deliver the Accommodation building. Design iterations through the 50% and 90% milestones were undertaken in late 2021 and early 2022 with a heavy involvement from the PNGDF Directorate of Engineers.

This project continues the focus on the development of the PNGDF Directorate of Engineers, working in concert with the



Live-In Accommodation 90% Design Render

Australian Defence Cooperation Program, to build their capacity and authority across the PNGDF Estate. The second phase of the contract was executed in June 2022 with works commencing on site in October 2022.

Although the vertical infrastructure is the "show piece" of the project, the underlying services work, that will support not only the new accommodation building but the central operations precinct of the Barracks, also commenced in 2022. 18 Works Section let a micro works contract to local industry in early 2022 to address the immediate need to remediate critical sections of the storm water system. This work saw a seriously neglected section of the network get back to being functional, but also to cease it interacting with and overburdening other services elements (such as waste water). This small investment has had a huge impact on the living conditions at Moem Barracks. The ingenuity, pragmatism and outcome focussed work supervisor teams that have rotated through Moem Barracks really showcase the value of the Chief Engineer Works to identify a problem and quickly execute a meaningful remedy



Side-by-side of "Before" and "After" micro works remediation in the OR quarters precinct

Goldie River Training Depot and Igam Barracks Essential Services Project

This year 18 Works Section has transferred responsibility of the continued development and eventual delivery of Essential Services upgrades to Goldie River Training Depot, Port Moresby and Igam Barracks, Lae. The project was commenced by the Indo-Pacific Enhanced Engagement (IPACE) Branch, Infrastructure Program in 2021. Design Services Consultant GHD undertook investigative studies at both bases to ascertain the level of existing water, waste water, power and storm water services, then provided options for remediation. Currently the scope of the project sees upgrade to the water and waste water systems at Goldie River Training Depot, and wastewater systems at Igam Barracks.

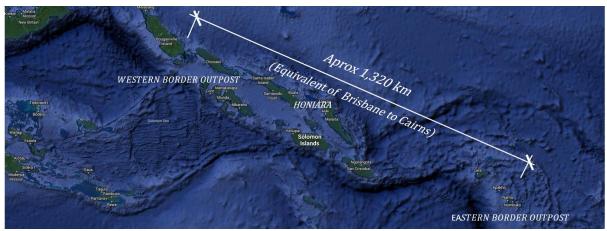
GHD undertook 30% Concept Designs for the proposed scope across both bases, which was delivered to the PNGDF in Port Moresby in May 2022. The 30% design milestone was the official hand over from the IPACE Infrastructure team to 18 Works Section. The water system at Goldie River Training Depot is the priority for remediation, with elements of the system being delivered directly by 18 Works Section. Concurrently, GHD are continuing to develop the design to 90% for more complex nodes and networks in the system.

196 Works Section

MAJ Christopher Zdjelar and WO1 Steve Parmiter

The re-raising of 12th Chief Engineer Works involved transferring the command of 18 Works Section from 19th Chief Engineer Works in Randwick to 12th Chief Engineer Works in Enoggera, and saw the re-establishment of 196 Works Section onto the Army's order of battle (ORBAT).

Since the beginning of the year, 196 Works Section has focussed its attention on the Solomon Islands, where it is responsible for three unique projects intended to enhance the Australian Government's regional ties with our long-standing Pacific neighbours. These projects consist of the development of both the Eastern and Western Border Patrol Boat Outposts, as well as significant upgrades to The Royal Solomon Islands Police Force's (RSIPF) Hell's Point Explosive Ordnance Disposal (EOD) Training Facility in Honiara.



A map of the Solomon Islands showing the relative distance between the proposed locations of the Eastern and Western Border Outpost sites and the country's capital, Honiara.

The Border Patrol Boat Outposts will include the establishment of multi-agency offices that will enable the Solomon Islands Government (SIG) to provide advanced community preparedness and improved border security in the geographically remote eastern and western border regions. The proposed facilities will enable resilient, prolonged and effective conduct of security, immigration, fisheries, customs and Humanitarian Assistance & Disaster Relief (HADR) operations along the eastern and western borders.

To facilitate these projects, members of 196 Works Section, the 1st Signals Regiment (1 SIG) and the 6th Engineer Support Regiment (6 ESR) formed a reconnaissance team under JTF637 and deployed in May 2022 to the Solomon Islands. The contingent, along with representatives from the SIG conducted a technical reconnaissance of the Western Border Outpost (WBO) site and the



Members of the team conducting technical ground reconnaissance of the Western Border Patrol Boat Outpost Site.



Some of the Reconnaissance Team consisting of (L to R) WO1 Steven Parmiter (196 Works Section Works Manager), CPL Nathan Burgess (6 ESR EOD Technician), CAPT Zach Bryant (6ESR Planner) and MAJ Christopher Zdjelar (196 Works Section Senior Project Engineer).

proposed Eastern Border Outpost (EBO) sites in the very remote Temotu Province. The reconnaissance was led by the Senior Project Engineer, MAJ Christopher Zdjelar, and comprised of the Project Engineer, CAPT Luke Staples, and Works Manager, WO1 Steven Parmiter, from 196 Works Section as well as SGT Brent McLean and CPL Nathan Burgess from 6 ESR who provided EOD advice.

Since the conduct of the reconnaissance, there has been significant traction with the project. CAPT Staples returned to the Solomon Islands with the CO/CE 12th Chief Engineer Works, LTCOL Jon Pollard, to

brief Senior Stakeholders on the progress and the way forward. Members of 196 Works Section returned again in September 2022 to conduct further stakeholder engagement for the Hell's Point EOD Facility and to hold a User Requirements Workshop for the Eastern Border Patrol Boat Outpost.

So, in the first year back on the Australian Army ORBAT, it is shaping up to be a busy few years ahead for 196 Works Section as we continue to strengthen the bonds with our Pacific partners in the Solomon Islands. We are committed to building on the long-standing relationship that Australia has with the Solomon Islands, but more specifically, we are excited about delivering highly functional, worthwhile infrastructure developments that will assist our friends in contributing to their national security.

202 Works Section

MAJ Stephen John

This year marked a milestone for the 202 Works Section in its re-raising and establishment as part of 12th Chief Engineer Works. During 2021, the Works Section had been under command of 19th Chief Engineer Works but has now moved formally across to 12th Chief Engineer Works as of January 2022.

The Works Section also welcomed some new members; CAPT Jarvis Black, CAPT Matilda Austin and CAPT Arbess Balbarais. We also farewelled CAPT Martin Wilshire, although he did not go too far and joined 196 Works Section on a 12 months SERVOP C period of service.

During the year a number of varied opportunities have occurred for the reserve members of 202 Works Section to support the ARA Work Sections. 202 Works Section tasks have been largely focused around the provision of support in completing 25 CPMS Quality audits and two Works Project Audits. Other major tasks have included CAPT Philip Lawton and CAPT Jordan Wareham planning for the Unit Resilience Training Activity, freeing up the capacity for other work sections to focus on live projects and the associated workload. For the remainder of the year, 202 Works Section assisted 18 Works Section with Project 234 – Essential Services located in PNG.

Outside of the traditional Project Management tasks, members of 202 Works Section also provided support to 11th Engineer Regiments Green Role and White Role Search activity at locations across Brisbane. This also included other activities such as CAPT Jordan Wareham and LT Matthew Doolan providing support to a number of Officer Selection Boards in Brisbane and Canberra.

This year has also seen significant progress in the development of a contingent workforce model that establishes a more seamless integration of SERCAT 5 and SERCAT 3 with the SERCAT 7 members going forward within 12th Chief Engineer Works.

The 202 Works Section members look forward to continuing to support 12th Chief Engineer Works in 2023.

Technical Support Section

SGT Stuart Folkard

Top civilian industry leaders have identified the benefits of collocating multiple technical experts to enhance proposals, planning and delivery of infrastructure projects. The Technical Support section has mirrored this model by amalgamating Multimedia, Information systems engineers, Surveyors and Draftsmen into a central cell. The following is a short update on the recent works these specialists have conducted during 2022.

Surveying support has been in high demand since the start of 2022 and a trip to Moem Barracks, East Sepik Province, PNG was conducted to investigate surface drainage and storm water infrastructure. SGT Stuart Folkard deployed with CAPT Benjamin Chambers,

who has an extensive surveying background, with the pair utilising multiple GNSS (GPS) survey receivers to create an accurate control network that was tied into existing state marks. They also took the opportunity to instruct some PNGDF soldiers on principles of levelling and total station operation.

The Survey and Draftsman capabilities have also been used as part of community engagement particularly focused at Science, Technology, Engineering and Mathematics (STEM) recruitment with a number of



CAPT Chambers explaining basic surveying skills to PNGDF infantry soldiers

engagement activities conducted. One of the largest activities was 20 students from Mount St Michaels, an all-girls private school in Ashgrove, who visited the Unit to be shown drafting capabilities and to take part in a practical activity to demonstrate the new technologies emerging in surveying.

Draftsmen

CPL Troy Roseman

The newly established Drafting cell for 12th Chief Engineer Works initially comprised of only CPL Roseman at the start of 2022 until SPR Adam Fidge joined the unit in mid-March after completing his Diploma of Building Design.

The cell has supported 18 Works section in the development of the Bula South Fly Warf Concept. The design concepts consisted of three different levels of camp and maritime options. CPL Roseman utilised Revit to design all options with Lumion Pro to create 3D renders and a Fly through to demonstrate the future look.



A render of the Bula South Fly Wharf camp option

CPL Roseman is the Unit's lead for Building Information Management (BIM) which is a new collaborative Project Management process being bought into the construction industry within Australia. CPL Roseman is creating a procedure for 12th Chief Engineer Works to establish and move projects into the BIM area which will also tie into the new Engineer Works Environment (EWE) and Autodesk Build software.

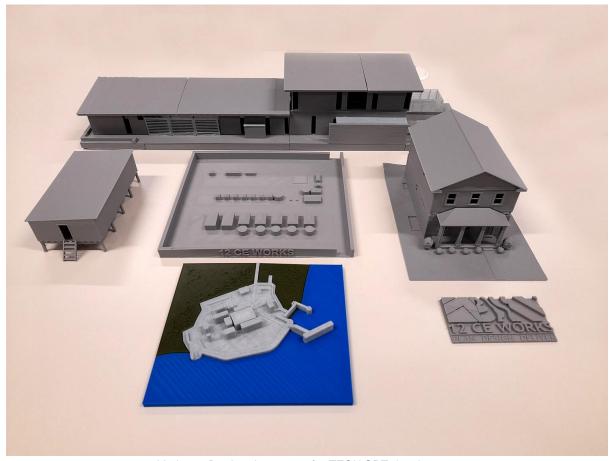
SPR Fidge has utilised his Drafting skills and merged them with the Multimedia Technician (MMT) to help showcase 2D drawings of conceptual designs into 3D printing concepts.

Multimedia

CPL Joshua Thomas

Multimedia is a new capability for the Chief Engineer Works and CPL Thomas has completed a significant amount of education on the abilities of a MMT. The Project Teams have listen and CPL Thomas has been very busy on the production of infographics, project placemats, posters, 3D printed architecture and Audio/Visual products. These products have assisted the works teams in the communication of site reconnaissance and designs to the Host Country Officials, Indo-Pacific Enhanced Engagement (IPACE) and other agencies.

The future looks bright for Multimedia support in the Chief Engineer Works with the Unit trialling VR capabilities and 3D printed architecture to enable TECH SPT to deliver advanced products such as 3DVista powered VR / mobile / desktop tours of infrastructure as well as 3D printed layouts that will allow the Project Teams to have a range of options for displaying designs for client and stakeholder reviews.

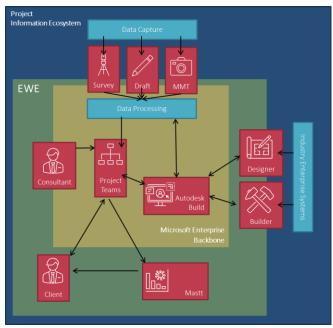


Various 3D printed concepts for TECH SPT development

Engineer Works Environment

CPL Ben Corsini

The creation of the Engineer Works Environment (EWE) has been the cornerstone of recent modernisation efforts at the 12th Chief Engineer Works. The EWE is a centralised information system intended to improve business processes through enhanced collaboration between Engineer Works elements, remote workers, industry and other external



EWE in context. A digital initiative that will allow the Engineer Works to integrate all aspects of the project management ecosystem to create a central data management and collaboration environment.

stakeholders. This is achieved by integrating a number of specialised software platforms within a Microsoft cloud environment.

Similar to other ICT acquisitions within Defence, implementation has presented a number of challenges. With that said, build activities have commenced and integration is scheduled towards the back end of the year. The significant progress that has been made to date on the EWE is contributed to the effort applied by the Chief Engineer Works, most notably MAJ Daniel Foley, as an extra-regimental duty. This initiative is destined to provide significant value within the Engineer Works community.

Laing O'Rourke Secondment

CAPT Tim Potter

During 2022, CAPT Tim Potter conducted a 12-month secondment with Laing O'Rourke on the Larrakeyah Defence Precinct Redevelopment Project. As the Managing Contractor, Laing O'Rourke was responsible to the PMCA and Client for subcontractor delivery of works packages across the project scope. During the secondment CAPT Potter was employed as a Project Engineer on a large civil works package, installing hydraulic and structural elements in the HMAS Coonawarra precinct. The package also contained two significant variation works; a Compensating Water system for submarine berthing at the new Wharf, and an upgrade to existing Waste Oil disposal facilities from existing wharves and maintenance facilities, with the former going through delivery phase and the latter through the various design stages during my time on the project.

This secondment was the beginning of a permanent secondment position allocated on the unit establishment of the newly raised 12th Chief Engineer Works, and provides a similar professional development as the John Holland 19th Chief Engineer Works program for 12th Chief Engineer Works Project Engineers. A strength of this secondment was the alignment of the placement within a Defence project; providing CAPT Potter with the experience of working for a Tier-One construction company while still gaining relevant Defence project experience. Not only does this provide a direct benefit to both CAPT Potter and the secondment organisation, it also provides an indirect benefit to Defence by having its member contribute to the construction of Defence infrastructure. A large but understated benefit of this secondment method is the enhancement of the secondment organisation's understanding and appreciation of Defence work thought the integration of an appropriately qualified member into the project team.

CAPT Potter was grateful for the opportunity to participate in an industry secondment program and is looking forward to integrating the development of his skills and experience into project works at 12th Chief Engineer Works. CAPT Potter would also like to thank the previous Career Advisor, LTCOL John Leathley for driving a large amount of staff work in CMA to stand this program up and to the CO/CE 12th Chief Engineer Works, LTCOL Jon Pollard, for supporting the position on the Unit establishment.



CAPT Potter at the Larrakeyah Defence Precinct Redevelopment Project site office

19TH CHIEF ENGINEER WORKS

Foreword

LTCOL Simon Everett

I would like to start by commending the workforce across both CE Works' in successfully reraising 12th Chief Engineer Works, the sister unit to the 19th Chief Engineer Works, back onto the ORBAT this year. It has been more than 20 years since there were two CE Works operating together in the South West Pacific. The growth in construction engineering capability has been a great accomplishment for the Corps but it has not been without challenges, some of which will continue into the foreseeable future.

After an unprecedented two years of disruption and adjustment, we are finally getting back to a degree of normalcy in our routines and project work. However, this 'normalcy' is still characterised by constant change and uncertainty. Workforce stability is key to managing through this next period. The models and systems that feed the construction engineer capability need more work to support retention as well as recruitment. At a recent visit to ADFA, we discovered that there were only 13 civil engineering students currently in their third year of studies, with only eight in their second. There appears to be a similar pipeline issue with the trades as well. This means we need to continue to work with the Total Workforce System to make up the delta and this will be no easy challenge for the CE Works and the Corps.

While workforce and other issues progressed in the background, our teams have continued to do what they do best: build partnerships geared towards successful project delivery. Everyone has been beyond busy and there have been many personal sacrifices. MAJ Karantonis was deployed for the majority of the year to progress the future infrastructure needs of the ADF abroad. MAJ Ashburner has taken the reins on both the Vanuatu and AACAP project loads. On top of this, he has filled the Quality Assurance Manager role and has done a great job in maintaining the ISO 9001 accreditation of the unit's CPMS. MAJ Havlin has been likewise busy in Fiji, reaching completion on the strategically important Blackrock Camp in March before moving on to reach contract signing with the successful builder on the new Maritime Essential Services Centre to be built in Suva over the coming 18 months. Our work in the SWP regularly attracts the attention of Prime Ministers and relevant ministers from all involved nations, a fact that has been highlighted by the photogenic CAPTs Attard and Laing.

The big story for this year was the recognition of 25 years of AACAP delivery. There are so many personal stories of involvement over this period, which spans almost half the life of the 19th Chief Engineer Works, as many were told at the official celebration in Gapuwiyak in October. This event was attended by senior NIAA representatives as well as Chief of Army and RSM-A. What was clear at this event was the positive change the program achieves, not only in the communities we visit each year, but also in the officers and soldiers that participate. I cannot express strongly enough how important this program is to Army and the Australian community and I look forward to watching it evolve over the next 25 years. Finally, I would like to thank the soldiers, SNCOs and Officers I have worked with over the past two years for the experiences and learning opportunities that you have given me. Time

in command is not easy and there will always be unique challenges that distinguishes the time of one CO to the next.

I congratulate LTCOL Michael Woods for his selection as the incoming CO and I warmly welcome him to the role. The next few years will be characterised by ongoing and significant tempo and workforce pressures as we continue to theatre set in the Australian outback, our near region and beyond. In 2023 the 19th Chief Engineer Works will celebrate its 60th year. This is fundamentally an achievement of all the people who have served under the unit's banner and include the industry partners – lawyers, designers, builders, specialists – who form the small dynamic multi-discipline multi-agency teams on which the unit's success is built. I am beyond grateful to have been a part of this unit's great history and I look forward to doing what I can to support the capability in my future postings.

Best wishes,

Lieutenant Colonel Simon Everett

11 Works Section - AACAP

CAPT Augustus Hortle August 2022

2022 proved to be a rewarding and challenging year with the pressures from COVID-19 in 2021 pushing issues downstream to 2022. This combined with ongoing supply shortages, construction industry insolvencies and internal work force pressures resulted in key changes made to the delivery of AACAP Projects in CY 22/23/24/25. The impacts of these changes will not be felt until CY 2023 but they will hopefully streamline several processes and adjust expectations to be better in line with the environment that AACAP operates within. Not to be dismayed by these changes CAPT Hortle commenced an active hair styling professional development series with other likeminded individuals in the unit, this series had significantly more participation than his failed FPE CPD series.

Upset by his lack of invitation MAJ Ashburner decided to remove the majority of his teeth with a pair of pliers. With fading vision and hearing WO1 Thorne could only look on with disappointment and forlorning as the number of excel spreadsheets he managed reached the triple figures. CAPT Farragher endured her trial by fire of a collapsing contractor through a series of subscriptions to alcohol delivery services. WO2 Cronin committed fully to his role in the SPS Leadership alliance by only working from home or site. WO2 Thompson integrated his considerable project knowledge and was a valuable mentor for all things construction and Metamucil. WO2 Michalk had a year of drinking from the firehose, an act he was familiar with from his time in Darwin although the removal of Great Northern from the firehose was a shock to the system.

PROJECT 216 - AACAP 21

With Project 216 in closure there were only minor DLP trips to be undertaken by the team. The quality of work completed by 6 ESR was excellent with minimal defects identified across all their scope items. Whilst this proved to be good for the project, it left WO1 Thorne a bit stroppy as he didn't have enough time on the ground to catch his elusive first Barra. With CRA rapidly approaching Thorney dedicated a considerable effort to getting out to all coastal projects.

PROJECT 226 - AACAP 22/23

The decision to split AACAP 22 into two delivery years was not a decision taken lightly however, the withdrawal of the primary contractor several weeks out from breaking ground forced a series of rapid procurements and decisions. Dividing AACAP 22 into two years alleviates a significant amount of pressure from the work section whilst allowing the employment of the total workforce model with 201 works section to be tested. With the extension of project over two years CAPT Hortle will have adequate time to coach WO1 Thorne on his cast and lure management.

Project 231 - AACAP 24

The decision to delay extended AACAP 22 resulted in AACAP 23 shifting into CY 2024. The extension has been mostly positive, with the PMT now able to better develop the needs statements with the community and build relationships with stakeholders throughout the region. These engagements will pay dividends as the project shifts into delivery in 2024. WO1 Thorne's mentorship on this project helped WO2 Michalk improve his financial management with Chalky returning the favour through having a child and taking paternity leave for most the mentoring periods.

Project 233 – Jigalong Remediation Project

Despite his best efforts MAJ Foley's shortfalls were remediated as a part of Project 233, with the causeway being designed for a flood event beyond 1 in 1 year event. Ironically during the DLP inspection the road leading out to the causeway was flooded resulting in WO1 Thorne and WO2 Coady not being able to view the causeway. The tensions of this trip are only hearsay but WO2 Coady was deployed to Fiji at the completion of their inspection. WO1 Thorne did not catch a fish on this inspection.

Project 23X - AACAP 25

As AACAP looks to the future, it is likely the program will be renamed to better represent first nations people in the Torres Strait as well as mainland Australia. This shift will see a project delivered in the Torres Strait in 2025. The challenges associated with the delivery of this project whilst significant offer a large reward. As CRA approaches WO1 Thorne has begun cursing the God's as the Torres Strait offered the highest likelihood of him being able to land his first Barra. An opportunity that will likely be denied to him.

108 Works Section - Fiji

SGT Christopher Fallon August 2022

2022 has so far been an unprecedented year for 108 Works Section, which has included significant milestones of both completion and handover of Project 221 Blackrock Camp to the Republic of Fiji Military Forces (RFMF) in March 2022 and also tender award and commencement of Project 227 Fiji Maritime Essential Services Centre (MESC) in July 2022. Project Team rotations have been on steady churn with time back in Australia a welcome relief from the South West Pacific weather and a well earned break with family.

PROJECT 221 - BLACKROCK CAMP (BRC) - VOTUALEVU, NADI FIJI

After 4 years in the planning and delivery through extreme weather and a COVID pandemic, 14 March 2022 saw the completion of BRC and the official opening ceremony with representation of senior delegates from Australian and Fijian Government and RFMF.

The completion and opening of BRC was a significant milestone for the RFMF and the Project Team of 108 Works having worked tirelessly to deliver world class HADR facilities along with additional scope items such as a fully refurbished mess facility in coordination with RFMF engineers and the remediation of the degraded camp rear training road. With a degree of sadness after 2 ½ years onsite, the Project Team demounted Blackrock in June 2022 however, continued to manage and monitor the projects through the 12 months defects liability period early 2023.



Blackrock Camp opening Ceremony

PROJECT 227 - MARITIME ESSENTIAL SERVICES CENTRE - LAMI, SUVA FIJI

In July 2022, the Australian Government announced that Australia would deliver The Maritime Essential Services Centre (MESC) Project. In the same month and after a long and exhaustive tender process, the Project Team from 108 Works awarded the project to Principal Contractor Icon.

The Project Team have established permanent presence in Suva in preparation to deliver the works with an expected delivery period of 24 months. Since July, the Project Team have also undertaken community consultation in preparation for commencing construction with planned activities for the balance of 2022 being grubbing and land clearing, bulk earthworks and in ground services.



Community engagement event

198 Works Section - Vanuatu CAPT Ian Brooks August 2022



WO2 Mathew Ellis supervises civil and concreting works at Cook Barracks

198 Works Section continues to deliver 19 Chief Engineer Works' premier project throughout 2022. More than half of the total construction works are now complete at both Cook Barracks in Port Vila and Tiroas Barracks in Luganville.

The year started with CAPT Lachlan Attard holding down the fort alone over the Christmas break in Vanuatu, before his rotation got extended several more months due to COVID-19 border closures. He was extremely disappointed that he was able to enjoy the tropical warmth longer, and very

glad to return to Sydney just as the cold winter months began.

Once the borders were open again the team were able to rotate in CAPT Ian Brooks, CAPT Oscar Dyer, WO2 Jamie Millar and SGT Greg Littleboy; using four people to replace the output of one. The middle part of the year saw the construction contractor continue works without COVID impacts for the first time, and the site productivity started to increase



a site visit for the first time since construction began. There were many realisations and

CAPT Oscar Dyer inspects reinforcing in concrete pavements at Cook Barracks.

substantially. At Cook Barracks the initial facilities were enclosed and roofed while internal walls continue. The latter stages of construction were started with demolition and bulk earthworks for the final buildings.

In July MAJ Craig Ashburner and WO1 Craig Fairweather were able to host the project directors from the Client (Indo-Pacific Enhanced Engagement Branch) and the design and construction contractors (all affectionately known as the 'Qantas Club') on

revelations about how the construction was progressing and why certain decisions had been made. Now that the borders are

opening up, the project team is anticipating more VIP visits and welcomes the chance to showcase the good work being achieved after a long period of isolation.

CAPT Attard was keen to return to site in August and pick up the pieces after his time away.

The project team set a target of completing and handing over the Logistics Precinct by the end of 2022 and momentum started to build as a partial finish line came into sight. Greater thought was now being put towards completion activities and the requirements for training and maintenance so the facilities will continue providing benefit to the Vanuatu Mobile Force for many years to come.



(Left-right) SGT Gregory Littleboy, WO2 Jamie Millar, CAPT Lachlan Attard and CAPT lan Brooks inspect the new Married Quarters being delivered for the Vanuatu Mobile Force at Cook Barracks. Photographer: Island Roots (a local photography business).

201 Works Section

Major David Sondergeld

The 201 Works Section commenced 2022 preparing to build on the previous year's project support through delivering project mentors, advisors and professional skills for the Total Workforce. With the flexibility and agility that 19th Chief Engineer Works needs to meet current and future workforce demands, the SERCAT 5 team committed to providing project mentors to the SERCAT 7 Project Management Teams. All members of 201 Works Section have exceptional skills, abilities, experience and formal qualification within engineering, commercial, contract delivery and project delivery disciplines to enable their seamless integration into the Project Management Teams. Support services covered design reviews and the provision of highly technical professional advice. This Total Workforce capability supports the 19th Chief Engineer Works Mission to plan, design, coordinate, control and deliver infrastructure engineering projects by providing specialist support across the spectrum of operations.

The 201 Works Section continues to forge new paths under the total workforce model to build a more flexible and sustainable Army. CAPT Kevin Doherty is civilian qualified professional engineer with expertise in project procurement, contract and commercial management. Early in 2022. Kevin provided assistance for the Tender Review Board for the procurement of the Maritime Essential Services Centre (MESC) Project on Fiji. Kevin also participated in the 19th Chief Engineer Works Technical Training and attended the Regimental Officer Basic Course.

Early in 2022, CAPT Alex Taylor, a qualified and experienced senior project engineer in his civilian role, had a project engineer role with the John Holland Sydney Gateway Project. This transformative road project for Sydney will reduce travel times by up to 40 minutes in the morning peak from motorists travelling Parramatta to Sydney Airport using the new motorway network. Alex was able to organise a structured site visit to the Sydney Gateway Project for members of the 19th Chief Engineer Works as part of their continuous professional development. The site visit included an insight with detailed commentary of the cutting edge project management system supporting a nationally significant project such as the \$1.5 billion Sydney Gateway Project. This professional education event provided 19th Chief Engineer Works an intellectual edge regarding infrastructure project delivery capability.

CAPT Matthew Palmer commenced work as the acting quality assurance manager with a substantive role to management and coordinate the process and procedural audits for the Construction Project Management System (CPMS). The CPMS is core to the 19th Chief Engineer Work project management capability. Matthew relied heavily on the total workforce to effectively complete all CPMS audits verifying process and proposing system improvements. The contingent workforce engaged in these audits not only provided an essential conformance task for the CPMS, but also provided for each auditor, knowledge and a practical application of the CPMS. Matthew continues with his quality management and CPMS project auditing in an acting quality assurance manager's role within 19th Chief Engineer Works.

CAPT Robert Cirillo, a civilian qualified civil engineer with considerable experience in water and wastewater reticulation system design and construction, supported a Defence Force

Recruiting activity in Sydney. Robert's support to this major career's exposition enhanced engagement opportunities for the target recruit demographic. Robert also participated in the 19th Chief Engineer Works Technical Training at the beginning of the year and attended the Regimental Officer Basic Course.

CAPT Matthew Jesson, a civilian qualified professional engineer with expertise in defence procurement was a member for the Tender Review Board for the procurement of the Maritime Essential Services Centre (MESC) Project on Fiji. This further demonstrated the ability of SERCAT 5 members to contribute key skills and expertise to ongoing and future tasks.

As the year progressed, due to a Deputy Chief of Army (DCA) trial, the 201 Works Section number of contingent workforce project engineers increased from seven to thirteen. During 2022, CAPT Andrew Cosgrove, CAPT Tennyson Chettipally, CAPT Alireza Farhoodi, CAPT William McRae, CAPT Martin Warda and LT Akhilesh Dhanekula joined 201 Works Section as Project Engineers. The Deputy Chief of Army directed a trial to explore establishment reform initiatives to simplify and improve force structure management and progress the Total Workforce System and to trial establishment mechanisms that support an agile workforce by enabling unit commanders to readily acquire and retain talent / residual skills in Army. 19th Chief Engineer Works was identified as a trial candidate due to future RAE growth requirements, geographical considerations and volume of potential contingent workforce. The depth of engineering and project management skills and experience is now at a considerable level to provide capability to not only Army, but Defence.

As part of AACAP, the 201 Works Section has a task to conduct the contractor procurement for a Design and Construct contracted agreement to deliver in the East Arnhem Region of the Northern Territory, community and arts centre at Gapuwiyak and a community shop at Baniyala. CAPT Kevin Doherty leads a diverse project management team with CAPT Matthew Jesson, CAPT Andrew Cosgrove and CAPT Aleksander Kocovski assisted by CAPT Matthew Palmer. The procurement, AACAP Baniyala, is progressing through the Request from Tender stage providing tangible and valuable organisational learnings for the Total Workforce System and project delivery.

SGT Chris Fallon, a 201 Works Section member, currently working under a SERVOP C providing project delivery support to the South west Pacific Projects, also provides administration support to the 201 Works Section. Chris provided the necessary administration support for the march-in and induction of the new projects engineers gained through the DCA trial. SPR Kurt Moroney an architectural draftsman, is also a qualified and experience building surveyor. Under the Total Workforce System, the 201 Works Section has an enhanced capability for 19th Chief Engineer Work to include the independent oversight of buildings and building work throughout the planning and construction process and upon completion; ensuring buildings are safe for use, accessible and energy efficient. This capability also includes many types of building audits, annual fire safety assessment, BCA audits, dilapidation reports, critical stage inspection, issuing occupation certificates and advice on many other building topics. CPL Glynn Stewart is a foreman architectural draftsman, again with an essential skillset that under the Total Workforce System, will enhanced the engineering design capability for 19th Chief Engineer. WO2 Scott Lee will

provide a critical work supervision role for the contingent workforce project management teams.

The 201 Works Section has an established and workable plan to support the current and future workforce demands by using the SERCAT 5 skills to provide a sustainable capability delivering real value for the SERCAT 7 Project Management Teams. The 201 Works Section will also conduct the effective continuous improvement to project delivery systems through project audits reviews and the application of civilian gained technical, engineering, commercial, project and contract skills to enhance Defence Project Delivery in a competitive and uncertain environment.

Unit Operations and Technical Support Section

CPL James Davison August 2022

Tech Support members assigned to OP Flood Assist 22.

Members of Tech support were force assigned to JTU 629.1 OP FLOOD ASSIST and tasked as part of the Australian Defence Force DACC Response to the NSW Flood weather event. The JTU 629.1.1 directly supported civilian agencies within affected areas in the Greater Sydney Basin. The members deployed to areas surrounding Richmond, out as far as Wisemans Ferry, where they assisted the SES and Rural Fire Service in clearing debris from home and local businesses.

Surveyors conducting aerial drone survey of Amata

LCPL Raymont and LCPL Kelly (Surveyors) conducted an aerial scoping and feasibility study of Amata, South Australia as part of the AACAP 2024 preparations. Using MRUAS they were able to survey 460 hectares in 2 days, when traditional surface methods could take up to a month. The successful completion of this survey has led to further developments and interest in drone survey, with future projects already incorporating it into planning phases.

Draftsmen designing 6 Aviation Blackhawk display

This year the Draughtsmen at 19CE Works were tasked with developing concept design for memorials to be constructed at 6th Aviation Regiment and 3rd Combat Engineer Regiment. After the Retirement of the S-70A-9 Black Hawk in 2021, 6AVN have secured one of the retired Black Hawks to be retained as a static display located at Luscombe Airfield, Holsworthy. CPL Bolis developed several proposals utilising the two proposed locations, one of which being co-located with the existing UH-1H 'Huey' Iroquois display and the other location positioning the Black Hawk on an elevated platform at the unit flag station.

Draftsmen designing the 3 CER unit memorial

SPR Ramiro was engaged by 3CER to provide concept designs for a unit memorial to be constructed in front of the 3CER HQ Building, Townsville. The design includes a raised central eternal flame surrounded by three pillars to display plaques and a wreath laying area surrounding the eternal flame to be inlayed with the units name, logo and patch. The memorial was constructed by 3CER members.

New Draftsmen posting into 19 CE Works

After completing their Diploma in Building Design and marching into 19 CE Works in June 2022 SPR Britten and SPR O'Keefe begun working on developing designs for Exercise Saunders 2024 (ACCAP). These concept designs for a Youth Centre and service provider's accommodation were refined throughout the latter half of 2022 with the input of the community members of Amata, S.A. The concepts were developed in conjunction with the data provided by the 19 CE Works Surveyors who have used 3D scanning and drones to capture precise data over a large area with minimal man power while operating on a compressed timeline.

Range Day 2022

19 CE Works held a live-fire range practice ay Holsworthy on the 05th May 2022. The practice was held to maintain staff proficiency in the safe and competent use of the EF88, and to ready personnel for potential Operational and CONFE duties. Firers conducted their AIRN practice, as well as RP3A on the day.



19 CE Wks Unit photo at the range May 2022.

Ex Blue Week

Exercise Blue Week was conducted over a 5 day period at HMAS Creswell, where members of 19 CE Works conducted sailing activities as part of an Adventure Training Activity. EX BW aims to promote self-development outside of the normal work environment. The mental and physical challenges were designed to aid leadership development and benefited the individual, unit, and organisation in the long term.

22ND ENGINEER REGIMENT

LT Michael Plant

2022 proved to be another testament to the strengths of the Victorian Sapper. The 22nd Engineer Regiment conducted itself across a full spectrum of activities, operations and ceremonies in what proved to be a very full and busy year. The year provided several opportunities for the sappers to demonstrate their versatility in their skillsets as well as their ability to transition from training to operations and then to ceremonial duties.

OP FLOOD ASSIST 2022

The Northern Victorian Floods event represented the second time in as many years that the Regiment responded to a Joint DACC task in less than 48 hours. 4 Emergency Response Force (4ESF) stood up in record time to respond to some of the worst flooding Victoria has seen in recent years. 4ESF was a 22ER led joint force operating at the O5 level with additional support from ASEME and the School of Transport. In true testimony to the Unit's flexibility and planning processes, 22ER was able to transition from EX Platypus Marksman, the annual range weekend at PMA, to force concentration and deployment from 4 BDE HQ at Simpson Barracks. In the space of 36 hours, the Regiment had cleared the range, force concentrated, established both an O4 and O5 HQ and started to assist the Emergency Services and people of Shepparton.

The Regiment achieved a great deal during the 3 weeks it was deployed on OP FLOOD ASSIST. With the ESF HQ established in Bendigo, LTCOL Scott D'Rozario was able to deploy small teams to towns across the AO in order to achieve the greatest affect and respond to flood waters in a timely manner. In particular the Unit was able to prevent the complete inundation of the regional town of Barmah, an important node for telecom service in Northern Victoria. The Troop assigned to assist in Barmah laid an impressive 5kms worth of sandbag walls to shore up the existing flood levy which not only protected essential services, but saved the majority of the homes and businesses within the town.

Pomp and Ceremony - Freedom of Entry

No unit is complete without its historic customs and traditions. For many on the outside looking in, the Army's customs and traditions are esoteric anachronisms, actions and events that one would expect to see in old British war films; not openly on display in the middle of metropolitan Melbourne. As well as partaking in the usual traditions of the Waterloo Dinner, 4BDE's Hamel Dinner and ANZAC Day, 22ER was honoured to be granted the Freedom of Entry to the City of Maroondah. Freedom of Entry to the City of Maroondah is an honour that was bestowed on 22ER's predecessor 4CER and was an excellent opportunity to continue the link the Regiment has with the people of Maroondah.

The parade was the culmination of many months of planning and deconfliction, spearheaded by 22ERs former RSM WO1 Mark Everingham and was enthusiastically embraced by the local residents and the City council. The stand out feature of the parade was the parading of the Corps Banner, an honour that few Reserve Engineer Regiments have had in the last few years. It was also an incredibly stirring experience for many of the soldiers and junior officers who have not seen the Corps Banner before, let alone been on parade with it.

Ceremonial occasions like this one have been incredibly important to the Regiment because they signify that not only is 22ER operationally capable and ready to respond to whatever tasks are laid before it, but the Unit is also one that is capable of carrying out our traditions to a high standard and engaging with our local communities as an entity they can be proud to associate with.

Training year 2022

On top of the Regiment's work in the operational and ceremonial spaces, 22ER has had one of the busiest and most fulfilling training years since the interruptions caused by COVID-19. In 2022 the Unit ran or participated in 19 separate training exercises. These exercises ranged from foundation warfighting to Search, CBRN, Dems as well as a number of construction blocks. The training built up the soldiers, NCOs and Officers to a stage where in 2023 they will be able to advance training to the point of full immersion in tactical operations. 22ER also partook in EX BORELLA STRIKE 22, 4BDE's combined arms training activity. The unit provided a section of Combat Engineers who successfully integrated with their RAInf and RAAC counterparts. EX BS 22 enabled excellent opportunities for a number of RAE JNCOs to practice their command skills as well as operating in a combined arms environment.

Finally, the unit ran a Search Team Commanders course, the first course run out of SME in a number of years. While challenging, the conduct of this course ensured that the Regiment's NCOs are adequately qualified to meet the changes to the MAE. The course was run over several weeks with the summative assessment occurring over a Regimental training weekend. This allowed the unit to both qualify Search Team Commanders while at the same time practicing search operations at the section and troop levels. The conduct of this course proves that Reserve Engineer Regiments are able to raise and maintain corps capability with some additional planning and support from SME.

HQ COMBINED ARMS TRAINING CENTRE - RAE TRADE AND TRAINING

In 2022, the RAETT Cell began the implementation of trade restructures as approved in Nov 2021 by the Defence Force Remuneration Tribunal. The restructure is a significant adjustment to all Soldier ECNs. It includes the amalgamation of some ECN's, alignment of Full time and Part time qualifications and capabilities, development of new training packages, transition of Emergency Response to a Combat Rescue capability and upskilling of all construction trades at CPL and SGT level with the inclusion of Certificate IV qualifications. While restructure commenced in 2022, the rollout it is not expected to be complete until Nov 2025. Whilst most of our workforce has successfully transitioned to the new structure, work continues on those that haven't.

A presentation has been produced and can be located by scanning the QR Code.

The enrolment key is **UBIQUE2022**.

Please check to see how you have been impacted.

Whilst DFRT implementation has been the main effort, work continued on modernisation activities, review and management of our 108 LMP's, processing of Training pre-requisite waivers and training short falls, assessment for overseas Lateral transfer applications and RPL/RCC applications.

Looking towards 2023, the team will be involved in modernisation projects including: Land Combat College (LCC) designed to enhance foundational and land combat capabilities for the generation of land power. Initial actions will be to transform the Foundation Capability Curriculum and establish the Land Operations Faculty. This will see development and trialling of new recruit and initial employment training requirements, and potentially adjustment to employment specification.

Military Employment Manual (MEM) aimed to replace the three single service documents to simplify and standardise the Defence People System. As part of the MEM, work has commenced on the generation of the Joint Employment Specification for the construction trades. The development of the Combat trade specifications will be our next step. The employment specifications codifies technical mastery (professions and trades) across the ADF in an open architecture format that is aligned to a capability end (rather than training design).

Specialist Service Soldier/ Technical Trade Warrant Officer Scheme. The purpose of these programs is to experiment with alternative acquisition, development and management practices to attract, motivate and retain soldiers primarily valued for their depth of trade knowledge. Such specialists are increasingly vital to maintain the Australian Army's competitive advantage, achieved through the qualitative capacity of the workforce. Review of our current trade structures to identify opportunities to participate in these programs. RAETT will review our trade structures to identify opportunities to participate in the program and then develop the policy and structure to support these initiatives.

For any enquiries on Employment Category you are invited to email: rae.hqcatc@defence.gov.au

SCHOOL OF MILITARY ENGINEERING

Foreword

In 2022 SME continued to deliver on its remit to provide Ab-Initio and trained force instruction, whilst looking to support the community and our people through a challenging year. The challenges this year reinforced the need for continued training transformation. In particular, we were required to integrate distributed learning, enhance the blended learning started in 2020 and modernise to ensure we had the flexibility to continue training the force without compromising on quality of output.

Combat Engineering Wing

CAPT Duane Russell



SPRs conducting tree felling during Initial employment training

In 2022, Combat Engineer Wing (CEW) continued to consolidate the implementation of the fulltime Military Engineer and Combat Engineer LMP's. This year commenced with a significant backlog in the RAE IET training pipeline due to a number of external factors compounding into a perfect storm. However, with the assistance of several Formation and Corps stakeholders, the Wing qualified approx. 200 Combat Engineers, 300 Military Engineers and 120 ARES Engineers through the conduct of 17 IET courses, reducing the time trainees would otherwise spend in holding and maximising their time in operational units. This could only be achieved as a result of outstanding efforts from the dedicated professionals within CEW. The Wing would also like to acknowledge and thank all those who have supported the sub-unit in 2023. Those personnel should be proud noting their commitment contributed toward shaping the next generation of ADF Engineers.

Aside from delivering training, CEW has achieved some immense personal goals. Our staff and trainees have

valued support to community engagement activities throughout the year. CEW have been honoured to provide support to the Ingleburn RSL, City of Sydney and the Long Tan Society across a number of services. The Wing entered a team into the 100km Oxfam walk event to raise awareness for a good cause whilst testing their resilience. Individuals from the Wing also provided support to OP LONDON BRIDGE, EX PUK PUK and other international engagement opportunities. CEW ended the year

provided



Watermanship phase of initial employment training

conducting Exercise Adventurous Sapper, an adventure training activity in the Blue Mountains. However, the biggest achievements were the family members added to the team, representing the ADF in domestic and international sporting events, and the conduct of personal/professional courses throughout the year.

In 2023, the Wing will continue to develop the fulltime LMPs and maximise the lived experience for each individual. Further connection with units will ensure we are providing the most relevant and realistic training. Lastly, CEW will prioritise the implementation of the new part-time LMPs which aim at increasing capability for ARES units. On behalf of the OC and WSM CEW, I would like to thank all of the staff within CEW. All the best for the rest of the year and in 2023.

"Create the Sapper"

Construction Wing

CAPT Charlie Cocks

In spite of having a self-proclaimed construction illiterate as an OC, 2022 has been a successful year for Construction Wing. With a full re-structure of the Wing, the staff here have pushed on to deliver excellent training, and chased some unique training opportunities too.

First with Apprentice Troop, or the artist formerly known as Trade Training Troop and before that Apprentice Troop...the more things change... As undoubtedly the biggest troop in Army (with 170 trainees and 13 staff), the staff have leaned-in and reshaped the structure and training focus of the apprentices and tradespeople in Army and RAAF. This re-structure now allocates the apprentices into three mixed-trade and equal seniority divisions: Alpha, Bravo and Charlie. The trade TP SGTs have been re-rolled as the "Division Supervisors" as the singular leader for 50 apprentices each (which no doubt looks very impressive on their PAR's).

The apprentices have cracked on with their civilian trade work, conducting on the job training (OJT) with civilian tradespeople to gain valuable trade experience in real-world construction tasks. Throughout all of this OJT, the staff have sought out opportunities to organise adventure training, military skills training and other opportunities to provide a unique training experience for the apprentices. The apprentices will be the leading edge of our HADR tasks and construction activities with our partners in the Pacific in the near future. The training delivered here is key to set them up to conduct this military-flavoured construction on operations in the future.

The Courses Troop, a combined Promotions and Civil Training Troop, were been busy. To support the demand across the Units for personnel (especially after the RAE implementation change of 20 Jan 22 – where tradies now do plant courses, and planties do trade courses), the staff of Courses TP have been committed to more training for more people by finding efficiencies in training delivery. While the relentless rain throughout the year nearly washed away dozers, and halted the plant training over and over, the staff remained flexible and innovative to meet the training requirements.

Despite all the work, the team also found opportunities in between the mountain of responsibilities to conduct other activities. Construction Wing provided a team to support the OXFAM 100km charity trail-walk, and handfuls of apprentices were spread far and wide supporting AACAP, Ex Puk Puk and Ex Harii Hamutuk with 6ESR, 3CER and 1CER. The AFENG brethren managed to sneak some apprentices onto a few RAAF joy-flights in support of the AFENG surveyor's course... And most importantly, Construction Wing won every SME Unit competition. Construction Wing has been a strong team this year and are proud of the efforts of all our people, and will no doubt carry this success into next year.

Engineer Tactics Wing

The talented and professional cadre within ETW provided crucial throughput of students throughout 2022 as each of the courses instructed maximum panels to alleviate any remaining COVID-19 backlog. ETW trained more than 580 RAE and 17 international commissioned and non-commissioned officers, which included more than 600 SERCAT 5 and 7 students.

Communication Information System (CIS) Cell. CPL Tisdell provided tremendous oversight and management as the ETW OPS SGT. His efforts, along with CPL Glover, CPL O'Connor and LCPL Rababi ensured professional delivery of BCCC MOD 1 to the Combat Engineer Wing's (CEW) IET courses throughout the year. The CIS Cell seamlessly achieved increased AB-INITIO training IAW DTR for more than 400 trainees due to the backlog from 1 RTB.

NCO Promotion Courses.

SUBJ 4 CPL Course. SGT Dunlop, CPL Parkes, and CPL Miller ensured the excellent instruction of 70 Sappers and JNCOs trainees, including international Soldiers from Fiji and Papua New Guinea. The team of instructors conducted two sessions of the Subject Four Corporal Combat Engineer Course with support from the Specialist Engineering Wing (SEW). The course is designed to prepare Sappers and JNCOs for conducting Section Commander duties in a Combat Engineer Troop within the RAE. The course encompasses the application of knowledge and skills required by an RAE Section Commander across a range of subjects, including Tactics, Wet and Dry Bridging, CBRND, Demolitions, Search and Explosive Hazard Reduction (EHR).

SUBJ 4 SGT Course. WO2 Waddell and SGT McIntyre rebuilt some key components of the tactics portion of the course by developing an Engineer Battle-space Assessment workbook. These developments intend to enhance an Engineer Sergeants understanding of, and how to apply their experience to, tactical analysis and resource planning. The SUBJ 4 SGT Course, in step with other promotions courses within ETW, continuously reviews the learning requirements in an effort to remove duplication of training and better define the roles and responsibilities of an RAE Troop Sergeant.

SUBJ 2/SUBJ 4 WO Courses. CAPT Price and WO2 Trevena continued using ADELE to facilitate a blended learning environment for the Warrant Officer courses. The blended approach allowed different styles of adult learning whilst residential learning and assessments encouraged networking as well as a more realistic assessment environment. Work has been conducted to ensure the assessments are relevant with current and emerging in service equipment as well as updates to the DATE-P. Planning has begun for

the 2023 Sub 4 WO Course, intended to more closely align with EOOC, which will enhance the ability for operations Warrant Officers to work alongside Engineer Operations Officers within the unit and deployed.

Officer Training Courses.

CAPT Sorrensen and WO2 Arp led this year's six-month ARA ROBC course. The course hosted international trainees from several military forces, including the New Zealand Defence Force, Republic of Fiji Military Forces, Papua New Guinea Defence Force, and the East Timorese Defence Force.

ROBC 2022 began in early February and concluded in mid-August, demonstrating as the longest RAE initial employment course for the officers. The 2022 course conducted three field exercises for the first time. Ex Kokoda, traditionally held at the end of course, was broken into two parts to provide more detailed training during each exercise. Students conducted Ex Kokoda 1 over several days and saw the ROBC practice operations around plant, install Hesco force protection means, Basic Combat Engineering tasks, and the construction of a Double Storey Medium Girder Bridge.

Ex Gauntlet Strike was conducted in Puckapunyal for the second year. This combined arms exercise proved a great experience for all students involved, as it combined RAE officers with students from the School of Armour, School of Infantry, and School of Artillery. The exercise presented a rare opportunity for the course to operate as part of a combined arms Combat Team, while the RAE ROBC students provided Mobility, Survivability and Sustainability and Counter Mobility support.

The ROBC culminated with Ex Kokoda 2 in the Holsworthy Training Area. This exercise saw the ROBC practice bridge demolitions, explosive hazard reduction, and camp and FOB construction. This exercise proved vital to their learning progression before departing for their next posting.



ARA ROBC students pause for a quick photo during Ex Kokoda 1

A sincere congratulations goes to the two 2022 ROBC Students of Merit: Non-Technical: LT Sure Van Niekerk

Technical: LT Joe Walsh

ARes ROBC.

CAPT Mitchell successfully delivered instruction to 17 students over a three week period. ARes ROBC has undergone realignment and adjustment during the second half of 2022 to run concurrently with ARA ROBC, with a pilot course running. This course will enable ARes ROBC students to work alongside their ARA ROBC cohort, further enhancing overall learning and interoperability.

EOOC

EOOC has undergone some large adjustments in 2022, led by CAPT Price and WO2 Trevena to provide a greater learning experience with more consolidated and relevant assessments as a result of an adjusted LMP. EOOC embraced the opportunity to return to residential instruction for 2022, which enabled more of a mentoring approach from the instructors as well as a great opportunity for networking and group problem solving from the trainees. ETW successfully trained 30 RAE officers in 2022 to serve as Engineer Operations Officers.

2023 Outlook and Closing

The ETW cadre look forward to additional improvements across the wing. One key planned improvement is to incorporate SUBJ 4 WO participation at the Combat Officer's Advanced Course (COAC). We're excited for this opportunity, which enables the WO panel to gain valuable training with their CAPT counterparts from RAE in Puckapunyal Military Area.

Ubique! Essayons! Forge the Sapper!

Training Support Wing

MAJ William Miles

Training Support Wing (TSW) encompasses the key logistical enablers of SME including maintenance, transport, physical training, logistics and medical which enable training and support all Wings within the school. Throughout 2022, the Wing has supported all the wings to enable delivery of key courses whilst also providing some excellent opportunities to individuals to conduct their own professional development. To hit off the storming phase, TSW conducted an adventure training activity which saw all SNCOs and Officers take to the Blue Mountains to complete a multi pitch abseil within the picturesque Grose valley. The SME Medical cell, led by CPL Emily Varley(RAAMC) and CPL Ellen Whittington(RAAMC) provided sound medical support to a wide nature of ab initio and career progression courses conducted at SME, such as medical support to enable demolitions ranges. In addition to this, the cell is a key enabler with the Explosive Detection Dog Tactical Care of the Combat Casualty training continuum, providing subject matter expertise within a number of training serials throughout 2022. Under the tutelage of the RQ, WO2 Rodger Tillard (RAAOC), the SME Logistics cell procured over \$1 million in support of a wide range of stores and equipment.

2022 also saw some notable achievement for TSW members with PTE Batta (RAAOC) embark on his career long dream of becoming a PTI, being accepted for the 2023 ADF PTI Course. He has since completed the ADF Fitness Leader course and has assumed physical

training responsibilities for the entire Civil Construction Plant Course in the second half of 2022. 2022 also saw the SME Transport Supervisor, SGT Simon Mackenna (RACT) selected to attend the CDF Senior Leaders Forum in Adelaide. This opportunity enabled Simon to integrate with other highly competent SNCO's from the ADF and provide input into the future of the ADF. Finally, the TSW TPCOMD, LT Meggs was selected to represent SME and lay a wreath at an ANZAC Day ceremony in Eastern Sydney. Well done for the tireless efforts of all TSW members in 2022.

Trainee Rehabilitation Wing

CPL Kristin Vidler

The Trainee Rehabilitation Wing (TRW), located on Holsworthy Barracks at the School of Military Engineering (SME), was formed in 2003. It is responsible for facilitating the rehabilitation of trainees who have reached their Initial Employment Training (IET) from all establishments within the Australian Regular Army.

TRW was located initially at Moorebank within the SME Steele Barracks compound. In 2011, TRW relocated to its new location adjacent to the Holsworthy Health Centre (HHC) at Holsworthy in a specially designed \$26 million facility.



TRW Trainees conducting drill rehearsals

Over the period of January 2021 to July 2022, there were a total of 81 Trainees, of which 32 successfully completed their rehab and returned back to their original IET's. Another 28 went to new IET's of their choice. TRW staff comprise of RAINF, RAAOC, RACT and RAAMC. The TRW battle rhythm runs in a fourweek training program. A combination of physio-led classes such as hydrotherapy, core classes or weekly physio appointments as well as PTI-led classes such as non-impact cardio circuits, strength and conditioning classes, functional circuits, PESA training,

swimming and the overwater obstacle course. There are weekly lessons run by the educational officers from 5 Brigade. Other lessons are mindfulness, yoga and range of movement exercises. However, with recent funding, we have now been able to provide recovery sessions consisting of an infrared sauna, massage chairs and ice baths, combined with breath work activities inspired by the Wim Hof method.

The Wim Hof method is based on three pillars. These are Breathing, Cold therapy and Commitment. Some but not all of the benefits are better sleep, reduced stress levels, increased willpower, a more robust immune system, increased energy and decreased inflammation. These essential factors can aid in recovery and promote a smoother rehabilitation process. TRW have implemented the Wim Hof method by having daily recovery sessions that focus on hot/cold or contrast therapy, meditation and focusing on breath work.

Military lessons are run daily and consist of all Corps training, consisting of Foundation Warfighting, Navigation, Medical, Communications, Weapons training and All Corps skills. This year some of the training was focused on navigation, where trainees received a refresher on static navigation leading to a culminating navigation exercise where they were tasked with navigating around the Holsworthy Training Area with multiple checkpoints while working within their restrictions. The trainees most recently had some refresher drill training, where consolidation of their activity consisted of an entire parade from start to finish filling all the positions on the parade ground.

TRW further supports the local community by participating in community activities, such as Riding for the Disabled Association (NSW), located at the Wollondilly Centre. Trainees and staff are involved in aiding disabled children to relax and have some fun riding horses. TRW also assisted in collecting money this year for the annual Red Shield Appeal, where SME as a whole collected \$7000.

Every month the trainees go on an excursion to allow mental health getaway, opportunities for personal development and a chance to talk to staff and fellow trainees in a relaxed environment. Past excursions involved visiting The Australian War Memorial, the Australian Maritime Museum, Convicts on The Rocks and a Resilience program at The Sydney Jewish Museum, which consisted of a 3 hr package that was broken into a resilience lesson, a guided tour and ended with an interview with a Holocaust survivor.

2021 to 2022 has been a challenging year and a half, navigating COVID -19 and all the ever-changing restrictions and evolving complexities. TRW has been able to adapt and overcome the many challenges of COVID – 19. TRW staff stayed focused on implementing strategies and coping mechanisms, allowing trainees to finish their rehab and return to their IET'S.

Operation LONDON BRIDGE

MAJ Elliot Hislop

From waking on the morning of the 9th of September I recall checking the news through bleary eyes and being saddened to learn of the death of Her Majesty Queen Elizabeth II. An odd sensation of regretful excitement washed over me as myself and fellow Engineers would soon travel to London to be part of the funeral. Receiving this news will no doubt become for me one of those moments you will forever remember; in the next two weeks I would have many more of these.



His Royal Highness the Prince of Wales speaks with Australian Defence Force personnel taking part in Her Majesty Queen Elizabeth II state funeral

In the days that followed information came thick and fast. Deployment orders were struck, medical clearances were needed and 39 OSB conducted RSO&I. As I walked past the dry zero lanes in 39 OSB facilities intended for deployments to a warzone I admit it all seemed a bit much. The necessity for all this, however, became apparent when we finally arrived in

Army Training Centre Pirbright. Soldiers from across the UK and world had come to participate in the largest event ever conducted in the UK and the longest parade any of us had done; we were going to need all the help we could get.

The Australian contingent consisted of soldier and officer representatives from RAA, RAE, RAInf, RAAOC and RAANC; for which Her Majesty was the Colonel in Chief or in the case of RAA, the Captain General. These relationships with Her Majesty are why some Corps were represented while others were not. In each case the Heads or Deputy Heads of Corps were invited by Buckingham Palace to attend the funeral at Westminster Abbey, a duty that BRIG Say performed on behalf of RAE.



Australian Defence Force personnel represented the nation in the United Kingdom following the passing of Her Majesty Queen Elizabeth II on 8 September 2022.

Once in Pirbright we married up with other representatives from the Canadian Armed Forces and New Zealand Defence Force; together known as the Commonwealth Forces Contingent. Immediately upon arrival and admittedly weary, we were ushered onto the parade ground under the guidance of Warrant Officers from the The King's Guard. Parade rehearsals began early and finished late. The night dress rehearsal was particularly gruelling starting at 3:30am and finishing a long four hours later; I can attest that staying upright was no small feat. The grandeur of this event properly hit me during this rehearsal. As we began our march from Westminster Abbey and turned onto The Mall, the street was lined with Union Flags the entire way to Buckingham Palace, all bathed in light, and not a soul around but us. A spectacle that was privately ours and a perspective of history that none but us will share. It became another one of those moments I will never forget.

Between continued rehearsals we were graced by a visit from Their Royal Highnesses the Prince and Princess of Wales who came to show their appreciation. CPL Ward and SPR Wilson represented us excellently with this engagement as they did throughout the proceedings. They along with the soldiers from the entire contingent performed admirably and without complaint regardless of the conditions; a testament to the qualities of the Australian Sailor, Soldier and Aviator.



After a week of anticipation and rehearsal, the day of the funeral arrived. Ferried on what seemed like every coach in London in the early hours of the morning over two thousand service personnel arrived at Wellington Barracks. A nervous energy filled our waiting area, everyone being distracted by card games or last minute polishing. At last we formed up on Wellington Barracks parade ground like so many had before us and set off.

The parade itself is one that you would have all no doubt seen. What may not have been apparent was the atmosphere amongst the crowd. Unlike other parades there was no applause, no cheers; nor did we need it. It did, however, speak to how this event differed immensely from those we had conducted previously. We completed our duties and were dismissed from the Wellington Barracks parade ground to immediately have the tension within us released and be replaced by a sense of quiet accomplishment. With our job complete we set our attention to the long journey home.



Australian Defence Force personnel represented the nation in the United Kingdom following the passing of Her Majesty Queen Elizabeth II on 8 September 2022.

On behalf of the Head of Corps, WO1 McAlinden, CPL Ward, SPR Wilson and myself; I thank you for the opportunity to represent us, the Royal Australian Engineers, in this most significant event. It is my hope that we have done you proud and in a manner befitting the memory and service of Her Majesty Queen Elizabeth II. I thank The King's Guard; whose patience and pursuit of excellence saw us to success. I also thank Australian Defence Staff in London and their UK Liaisons for guidance and being with us every step of the way. Finally, I thank the remainder of the contingent and leadership for their support and camaraderie that empowered us to do the job.

Long live the King!

SPECIAL OPERATIONS ENGINEER REGIMENT

The men and women of the Special Operations Engineer Regiment (SOER) continued to achieve significant milestones through 2022. The unit continued the development and employment of highly technical effects to counter complex chemical, biological, radiological, nuclear and explosive (CBRNE) threats on behalf of the ADF. This saw the continuation of training and operational engagements with our allies and partners in the Indo-Pacific, North America, Middle-East and Europe. The unit continued to provide dedicated force elements to SOCOMD's standing high readiness Domestic and Global Contingency JTFs as well as support to enduring operations in the Middle East.

SOER's multidisciplinary workforce continued to work in small teams to achieve its missions. As such the Unit has contributed to the important work being led by the Defence Special Operations Training and Education Centre (DSOTEC) in the Special Operations Forces – Workforce Review (SOF–WR) and the Special Operations Forces – Individual Training System Review (SOF–ITSR). Both bodies of work will result in generational changes to the way that SOER personnel from all trades and backgrounds are recruited, screened, selected, trained, employed, career managed and remunerated. The SOF-ITSR is being implemented throughout 2023, and further information is provided below.

SOER maintained its standing commitment to the SOCOMD Domestic Counter Terrorism capability. This saw continuation of the relationships with domestic agencies on the Australian and New Zealand Counter Terrorism Committee (ANZCTC). Two key events were conducted in 2022. In June SOER staff accompanied an Australian delegation to CAPEX in the United Kingdom in conjunction with Defence Science and Technology Group (DSTG) and Home Affairs staff. In September, SOER hosted a small unit engagement with all states



Members of the SOE RTC inspect a suspected device during an urban building clearance

and territory regional bomb disposal unit EOD operators as part of a Chemical Biological and Radiological threat focussed skills exchange. SOER also contributed to key SOCOMD, Army and ADF contingency response validation activities, with operational capabilities reaching significant milestones after a decade of development.

Land 3025 Phase 1 declared Final Operating Capability with effect 29 March 2022. The project was delivered on time and under budget with an increased level of capability than was originally envisaged. This is a significant milestone in a decade long collaboration between Capability and Sustainment Group, DSTG, SOER, AHQ and SOCOMD Mod and is a credit to all of the staff serving in the respective project appointments over this period. 2023 will see the continuation of L3025 Phase 2 acquisition and operational testing and evaluation tasks, as well as preparations for input into L1530 scoping activities.



Members of the SOE RTC learning urban movement

What's next for SOER?

The strategic environment continues to be characterised by increased Weapons of Mass Destruction (WMD) risks, from nuclear blackmail in Europe, an ongoing advanced conventional weapons arms-race, proliferation, terrorism in the Indo-Pacific and domestic recovery and support tasks. SOER's operational tasking's are continuing to grow to face current and emerging threats. The next few years will see significant levels of investment into Counter-WMD capabilities, which will most importantly include investment in the people that provide it.

Interested in a career at SOER?

SOER looks for people who want a challenge. We solve complex problems through multidisciplinary teaming. Service within SOER is now possible as either a Special Forces



SOE conducting manual access into a suspect device

Integrator, or a
Special Operations
Forces Enabler and
at SERCATs 3, 5 and
7. The ADF School of
Special Operations
(ADFSSO) screens
candidates for service
within SOCOMD via a
diagnostic
assessment.

The diagnostic assessment is designed to assess candidates' suitability for service in SOER

and SOCOMD. Candidates are screened psychologically and physically and will go through a number of assessments to test their application of scientific principles and technical aptitude.

Candidates interested for service as an SF Integrator will be required to pass a Special Forces Entry Test and Module 1 of the Special Forces Selection Course. Thereafter they will complete SF Foundations Training and the Special Operations Engineer Reinforcement Training Cycle, a total of 11 months of training.

SOF Enablers serving within SOER typically bring existing skills from their backgrounds in science, forensics, law enforcement and other disciplines.

The Special Operations Information Tour is the best forum to gain information regarding service in SOER from current serving Soldiers and Officers.

Further information on the application process, screening and key contacts can also be found on the ADFSSO Sharepoint page accessible through the Defence Protected Network via the link http://drnet/Army/ADFSSO/Pages/Join-SOCOMD.aspx

SOER Association

The unit was again supported by the SOER Association in 2022. The SOER Association is a veteran's support organisation that supports past and current serving members of SOER, the Incident Response Regiment and their families. The Association aims to promote the general welfare and prosperity of veterans and their families and to assist in increasing quality of life through providing advocacy, well-being initiatives and welfare support services. Further information about the Association can be found on their website by scanning the QR Code.

END OF SERVICE TO THE CORPS

Head of Corps, Royal Australian Engineers, would like to thank the following members for their long service to Army and the Corps:

MAJGEN:

Billington, Glen Allan

COL:

Gallagher, Matthew Allan Richardson, Matthew

LTCOL:

Boxall, Matthew Paull Burgess, Jennifer Kay Dalman, Leigh Michael Heares, Todd Garry Medina, Marcos O'Neill, Mark Platt, Lisa Jane Smith, Clark

MAJ:

Budge, Timothy Bury, Darren Delgado, Jeffrey Durrant, Billy Foley, Daniel Hanigan, Damian Hinde, Nigel Koen, Gerard McGinnes, Andrew Mowat, Adam Stannard, Gregory Tharmarajah, Seralaadan Thomson, Christopher Wharton, Jeffrey White, Alan Willetts, Mark

CAPT:

Baker, Edward
Batten-Smith, Chase
Colley, Joseph
Finger, Kirby
Fisher, Rohan
Garfield, Lisa
Jones, Matthew

Kierath, Daniel Lush, Jack Mynott, Thomas Parkinson, Daniel Pentney, Matthew Shone, Andrew Squires, Jack Stevens, Tiana Willcox, Claye

LT:

Kiel-Chisholm, Christopher Todd, Christopher

WO1:

Behan, Keiron Gardiner, Peter Hicks, Richard Mangan, Peter

WO2:

Collison, James
Holzknecht, Michael
Lee, Scott
Meech, Wayne
Rowe, Clinton
Scaroni, Bradley
Schaefer, Christopher
Simpson, Russell
Smith, Rodney
Williams, Gavin
Wolfe, Spencer
Wyness, Leeroy

SSGT:

Gibbings, Phillip

SGT:

Bell, Michael Britten, Michael Daleris, Daniel Farraway, Ian
Hayward, Scott
Marshall, Jonathon
Morrissey, Stuart
Mulhall, Brian
Ramsay, Dain
Renew, Christopher
Rushforth, Mitchell
Smith, Dane
Stavely, Christopher
Walker, Terry

CPL:

Anderson, Thomas Benson, Richard Bowtell, Christopher Boyd, Flinn Bright, Quentin Channing, Jonathan Chapman, David Collier, Byron Coutts, James Cowie, Brogan Cumming, Heath Donovan, Courtney Ferguson, Jonathan Fowler, Shayne Goodin. David Hambly, Lewis Hasancevic, Fahrudin Hawkins, Matthew Hurst, Jason Kahler, Beau Keynes, Paul Margi, Gabriel Marshall, Samuel McCarlie, Malcolm Mintern-Lane, Lee Morrisey, Shane Muir. James Ritchie, David Room, David Ruttley, Barry Seabrook, David Simmonds, Luke

CPL (cont.):

Stewart, Glynn Sullivan, Matthew Thorn, Darren Van De Laarschot, Cameron Van Moolenbroek, Teun Young, Michael

LCPL:

Anderson, Kane
Birkett, Joel
Clifton, Thomas
Cormack, Timothy
Jefferies, Dane
Johnny-Moore, Mohamed
Malek, Aidan
McNaughton, Richard
Nowland, Robert
Palamara, Nicholas
Sathivail, Kandhan
Schmidt, Glenn
Turk, Aaron
Withers, Trae

PTE:

Anderson, Stuart Applebee, Tyson Aspland, Dean Aumua, Isaac Auwardt, Rvan Bayly, Brendan Beer, Baden Benedetti, David Bradford, Michael Chandler, Daniel Cody, Hayden Creighton, Jasmine-Rose Cristobal, Lucito Davies, Andrew De Riecroft, Warwick Dougan, Paul Elliott, Thomas Emmerton, James

Emond, Mollie Evans, Nicholas Fletcher, Joshua Flint, Jackson Gilbert, Daniel Gooden, Matthew Gordon, Xavier Green, Nathan Grove, Harry Hagan, Liam Halias, Bailey Hanna, Callum Hannaford, Jack Hanssen, Edward Haque, Juwairiyah Harris, Karl Harvey, Joshua Hayes, James Healy, Jonathan Holden, Thomas Holyoak, Rhys Hutchinson, Jordan Hvvtinen. Timothv l'Anson, Karl Johnson, Mitchell Knight, James Kowalczyk, Tomasz Lawton, Zachary Leathers, Lachlan Littlejohns, Graeme MacDonald, Brett Mason, Luke Matthews. Curtis McCarthy, Brian McDonald, Brendan McDonough, Nicholas McKeogh, Hayden McLachlan, David McTaggart, Jack Mercuri, David Monkley, Peter Morland, Philip Moroney, Kurt Mulder, Brendan Murrell, John-Paul

Neal, Jason

Nesbitt, William Newall, Jacob Nichol, Chloe North, Benjamin Odell. Matthew Oehlrich, Edward O'Neill, Alexander Otto, Anthony Pargeter, Joe Parke, Samuel Pearce, Blair Piggott, Brett Prosinski, Oscar Rhodes, Ben Richter, Duane Robertson, Peter Rodricks, Braeden Schembri, Daniel Shulgin, Adrian Skinner, Mark Small, David Smith, Rowan Spear. Chloe Spring, Rebecca-Lee Stever, Brodie Taylor, Christopher Taylor, Drew Temple, Jake Thomson, Phillip Thorpe, Samuel Tinson, Mathew Treloar, Brendon Wallace, Tobias Waller, Matthew West, James Whipp, Kristian Williams. Benjamin Williams, Daniel Zakulis, Luke





