FORESTS, FIRES & FORTIFICATIONS

1st Edition

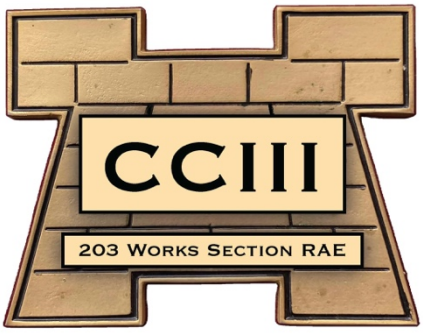
The 75th (Diamond) History of HQ 22nd Engineer Regiment, 105th Construction Squadron and 203rd Works Section, Royal Australian Engineers.

(Victoria's Own Construction Sappers 1950-2025)

COMPILED BY
LTCOL DON HUGHES









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We welcome any corrections and additional information that will enhance this publication, please email president@raevictoria.com with your comments and suggestions.

It is anticipated that the second volume in this history series of the Royal Australian Engineers in Victoria, will focus on Field and Combat Engineers. Presently the Combat Engineer units in Victoria are 8th Combat Engineer Squadron and 10th Combat Engineer Squadron. They descend from a long line of Field Engineer units raised in Victoria

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TIMELINE 75th DIAMOND HISTORY

1788	First Fleet arrives in Sydney Cove to establish the Colony of New South Wales
1834-44	Eumeralla Wars, Western District
1837	Melbourne declared a town
1851	Victorian Gold Rush
1851	Black Thursday Bushfires (6 Feb)
1851	Port Philip District Promulgated as Colony of Victoria (1 Jul)
1854	Victorian Volunteer Corps Act
1854	Eureka Stockade
1860	Corps of Victorian Volunteer Engineers Raised, Duke of Rothesay Hotel (first Corps in Australia) (15 Nov)
1860-1902	NZ wars, The Sudan, Boer Wars, Chinese Boxer Uprising
1861	Victorian Volunteer Engineer Rules Gazetted (Mar)
1863	First Orderly Room, Beehive Hotel
1865	First Permanent site, Lygon Street Carlton (Trades Hall)
1868	Jolimont Depot, Wellington Parade
1884	Victorian Engineer Corps renamed Corps of Engineers, Victorian Militia
1890	Alexandra Avenue Depot, (a boat shed since 1868)
1901	Federation of all Australian States
1902	Corps of Australian Engineers formed (1 Jul)
1907	Royal Australian Engineers title granted (4 Oct)
1914-18	World War One
1918-20	Spanish Flu Pandemic
1934	Swan Street Depot,
1934	Old Sappers Association formed
1936	Australian Engineers Militia were given Royal Assent
1939	Black Friday Bushfires (13 Jan)
1939-45	World War Two
1945-52	Japanese Occupation & administration
1947	United Nations deployments commence
1948-60	Malayan Emergency
1950	22 Construction Regiment SR (Supplementary Reserve) raised in Victoria with first camp at Seymour
1950-53	Korean War
1953	16 Construction Regiment (SR) raised in Latrobe Valley
1956	Melbourne Olympic Games
1957	203 Works Section raised
1963	SR Deployment to Papua New Guinea
1966-74	Vietnam War
1967	SR officers first visit to Vietnam
1970	20-year anniversary of SR
1971	21st Birthday/Banner Parade
1975	16 Const Regt & 104 Sqn disbanded
1965-80	Rhodesia, Commonwealth Military Force
1983	Ash Wednesday Bushfires (18 Feb)
1988	Australian Bicentenary
1989-90	Namibia - Peace Keeping Force
1991	Swan St Depot closed and relocated to the Oakleigh Multiuser Depot
1992	107 Sqn disbanded
1990s	SR changed to normal conditions reserve
1997	106 Sqn amalgamates with 105 Sqn
1999-02	Timor Leste – Peace Keeping Force
1999	55 Resources Sqn amalgamates with 105 Sqn
2000	Sydney Olympic Games (OP GOLD)
2000	GOLDEN (50th) ANNIVERSARY
2001-21	Afghanistan War
2003	Myrtleford Bushfires
2003-09	Iraq War
2009	Black Saturday Bushfires
2014	4 CER & 22 Const Regt amalgamate as 22nd Engineer Regiment.
2014	RAE Association of Victoria is incorporated.
2019-20	Black Summer Bushfires
2020	COVID-19 Pandemic
2020	PLATINUM (70th) ANNIVERSARY
2025	DIAMOND (75th) ANNIVERSARY

The **Versatility** of a Sapper

"Well may it be asked",

Wrote Captain and Quarter Master, T.W.J. Connolly,
the Historian of the Royal Sappers and Miners in 1885,

"*What is A Sapper?"*

"A person of all work of the Army and the public – astronomer, geologist, surveyor, plant operator, draughtsperson, artist, architect, traveller, clerk, explorer, antiquary, mechanic, diver, firefighter, soldier, and sailor; ready to do anything or go anywhere".

"In short, a SAPPER."

(Note: The Royal Sappers & Miners were raised in March 1772)

The Royal Australian Engineers Association of Victoria

acknowledges the traditional inhabitants of our country, particularly the Wurundjeri people of the Kulin Nation.

Aboriginal and Torres Strait Islander readers are advised

that this publication contains images of people who have died.

Who is a Sapper?

The word “sap” originates from the Old French word “*sape”* meaning an agricultural digging tool like a hoe or mattock. The Plaque located at the Engineer’s Memorial (Bridge of Repatriation) in Sapper’s Lane at the Heidelberg Repatriation Hospital, Melbourne, explains the origins further:



Acknowledgements

Rob Youl. Forester, author, and historian. Commanding Officer of 7th Engineer Support Regiment and officer commanding of 91st Forestry Squadron. Graduate of Scheyville and served in the Territorial Army in Britain.

Bruce Campbell. Licensed surveyor for 50 years, military historian, and member of 105th Construction Squadron for 22 years including 11 as its Officer Commanding. Visited Vietnam as a Citizen Military Forces (CMF) officer.

Jim Davis. Banking executive with PNG service. Squadron Sergeant Major of 105th Construction Squadron & Regimental Sergeant Major of 22nd Construction Regiment.

Noel Tipton. Career soldier and building supervisor. Served in Zimbabwe and Timor Leste. Officer Commanding 105th Construction Squadron and 203rd Works Section.

Bill Van Ree. Electrician & humanitarian deminer. Served in Pakistan, Afghanistan, and Bosnia. Commanding Officer of 22nd Construction Regiment.

Mel Constable. Builder & Cabinet Maker, military museum curator and historian. Served in 10th Field Squadron, 16 Field Engineer Regiment and 7 Field Engineer Regiment and various RAE Associations.

Don Hughes. Carpenter & joiner, builder, military & social historian. Served in UK, PNG, Indonesia, and Mozambique. Officer Commanding 105th Construction Squadron and Commanding Officer 4th Combat Engineer Regiment.

Don Hughes and Zeus

Don has been the instigator and driving force behind this publication.

He has compiled a great record of the Victorion Sappers evolution from 1835 until 2025 in this, the 75th Diamond Anniversary, 1st Edition of FORESTS, FIRES & FORTIFICATIONS.



Don Hughes and Zeus, ANZAC Day 2021 (Photo by Bill McCauly)

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Doctor G. (George) Gittoes AM

This history was officially launched at the Heidelberg Repatriation Hospital on 11 November 2025 (Remembrance Day) by the Chairman of the Austin Health Board, Mr Ross Cooke OAM and the Veteran Liaison Officer at Austin Health, Mr Robert Winther OAM, JP.



FOREWORD

Major General S. (Stephen) Day DSC, AM
Representative Colonel Commandant,
Royal Australian Engineers

Fellow Sappers, *Forests, Fires and Fortifications* is a timely history that captures the recent operational challenges facing military engineers (sappers) in Victoria. The battles against bushfire and other weather events along with the COVID pandemic, highlight the diverse array of skills needed by a 21st century sapper.

Numerous conflicts and operations in the last 75 years have sharpened the warfighting skills needed by our military engineers. Professional engineering expertise however, can often only be found within the broader civilian community.

This dovetailing of the military and civilian engineering professions gives our nation a critical capability in defending our sovereign interests.

This diamond history brings alive the fascinating journey and heritage of this important national capability. It includes many personal accounts of individual sappers in a diverse range of situations and frames the resultant operational capability within a broader social and political context.

Also, the history captures the vital support provided by associated "sapper" organisations in Victoria who underpin this important national capability.

Enjoy the read.

Facimus et Frangimus,

Stephen Day

Major General S. (Stephen) Day DSC, AM
Representative Colonel Commandant
Royal Australian Engineers



PREFACE

Major B. A. (Bruce) Campbell RFD, ED (Retd)

The Royal Australian Engineer units currently active in Victoria were born out of the Supplementary Reserve (SR) initiative from World War Two. Headquarters 22nd Engineer Regiment, 105th Construction Squadron and 203rd Works Section still provide Australia with a unique military resource to be used in times of conflict or emergency.

As Australia's oldest and still active one-time Supplementary Reserve units, these military units embody a unique and powerful pedigree that well deserves their place in history. A fresh history of these Victorian construction engineers is long overdue and most fitting to be undertaken for their 75th year in 2025.

The concept of Supplementary Reserve Engineer units was born out of a system established in Britain before WW2 and adopted in Australia in the late 1940s. The units were to be made up of personnel with experience of engineering construction who could at short notice leave their civilian jobs, don their sapper uniforms, and move straight into military engineering construction tasks, generally in the line of communication areas. In later years, of course it was realized that, like all sappers, they must be competent fighting soldiers, and soon military skills were added to their training.

The first SR Engineer unit formed in Australia was 22 Construction Regiment commanded by Lieutenant Colonel I.J. (Paddy) O'Donnell OBE a veteran engineer officer who served in WW2. In civilian life he was the Country Road Board's Chief Bridge Engineer.

22 Construction Regiment was formed on 4 August 1950 and attended its first camp at site 17, Seymour commencing on 5 September 1950. The organisation of the regiment was then:

Regimental Headquarters, sponsored by CRB and commanded by LtCol I.J. O'Donnell OBE,

104 Construction Squadron sponsored by CRB, commanded by Maj R.F. Eastick MBE,

105 Construction Squadron sponsored by SR&WSC, commanded by Maj V.G. Swanson,

106 Construction Squadron sponsored by MMBW, commanded by Lt H. Miller and

107 Plant Squadron sponsored by CRB and SR&WSC, commanded by Capt W.H. Dolamore. The Squadron was largely used as a holding unit made up of officers and NCOs having breaks from unit duties to attend to civilian tasks or attend military training courses. 203 Works Section was also an early SR unit, often attached to 22 Construction Regiment.

Later in the early 1950s other SR units were formed under the sponsorship of other State Government Departments, notably 16th Construction Regiment sponsored by the SECV and 91st Forestry Sqn sponsored by the Victorian Forests Department. Other units were also formed, particularly in NSW, soon after the formation of 22 Construction Regiment.

In the years since 1950, conditions have changed, particularly because of the break-up of the sponsoring authorities, and organisational changes by the Army. Many units have now been wound up leaving, of the original SR units in Victoria, only 22 ER RHQ, 105 Const Sqn and 203 Works Section.

22 Regiment went through several changes in the period 1975 to 1997, with the disbandment of 104 Sqn in May 1975, 107 Sqn in 1992 and the amalgamation of 106 Sqn with 105 Sqn in 1997.

104, 106 and 107 Sqn's had provided wonderful support to 22 Regt throughout their periods of service, and it is hoped that, should regimental personnel numbers increase, we may once again see the rebirth of at least some of these wonderful units, in the future. Meanwhile, as we write this 75-year history of 105 Sqn we remain fully aware of the tremendous contributions made by 104, 106 and 107 Sqn's.

Born out of a need to have highly skilled and experienced technical Sappers, of all ranks and trades, who could answer the call when needed, the Supplementary Reserve scheme has proved highly beneficial to not only operations abroad, but also at home.

80 years since the end of WW2, the Supplementary Reserve has become one of the great legacies of that conflict. Its Sappers have actively participated in the defence of our country for many decades post 1950.

Many wonderful and talented characters from all walks of life have contributed to this national military asset. The units embody a rich kaleidoscope of Australians from a diverse array of backgrounds.

As I look back over my life, I cannot help but feel immensely proud of my involvement throughout the last 65 years with the Victorian Engineers. When those young Men and Women saved Victoria from the threat of savage bushfire and the invisible COVID virus in 2020, I reminisced over the countless hours, that became decades, of training and dedication needed to be able to call yourself a Sapper.

This new generation of Sappers are doing their country proud.

Good Sappering,

Bruce Campbell

Major B.A. (Bruce) Campbell RFD, ED, (Retd)

Officer Commanding, 105th Construction Squadron (SR) 1965 -76



PROLOGUE

Colonel B. M. (Bruce) Murray AM
Colonel Commandant Royal Australian Engineers – Southern Region

This history reveals the story of Victorian construction sappers. Those individuals who volunteered to join a unique institution that has provided an extraordinary military service to the state and nation for over 75 years.

Sappers hold a unique ability to respond with engineering capabilities to the needs of the nation during war and peace or in response to a humanitarian disaster. Furthermore, they project that capability anywhere in the world in support of allies or to support the national interest.

Volunteer sappers have proven their worth time and again down through the ages. In 1779 George Washington formed the US Army Corps of Engineers from volunteers who played an essential role in the Revolutionary War battles. Over the next two centuries the Corps would build fortifications and works of both military and civilian nature, eventually taking on full responsibility for the nation's public works which they continue to do today.

In Australia prior to federation, the Victorian Colonial volunteer sappers were responsible for the fortifications constructed in defence of Port Philip and supported Imperial led fracas in Sudan and South Africa. Victorian sappers served with distinction during the First World War contributing to more than 40 units of the Australian Corps of Engineers. With the outbreak of World War II, the demand on sappers expanded greatly, eventually reaching a peak of 33,000. And it was the militia or Citizen's Military Force (CMF) of volunteers that provided the expansion base required to meet that remarkable number.

Victorian CMF sappers volunteered from every corner of private and public life from railways yards to restaurants and power stations to the police force. A unique blend of individual talent and passion to serve that has produced an extraordinary enterprise.

UBIQUE,

Bruce Murray

Colonel B.M. (Bruce) Murray AM
Colonel Commandant
Royal Australian Engineers - Southern Region

"In peace prepare for war, in war prepare for peace!"

Roman motto: *"Si vis pacem, para bellum"*

One of the most important treatises on war and peace ever written was

"The Art of War"

by Sun Tzu in China over two and a half thousand years ago.

Sun Tzu highlighted that the *"art of war is of vital importance to the state. It is a matter of life and death, a road either to safety or to ruin. Hence under no circumstances should it be neglected".*

He wrote many truths that are just as applicable today, as back then. He recognised the significant importance of peace and humanitarian operations:

"The supreme art of war is to subdue the enemy without fighting……..."

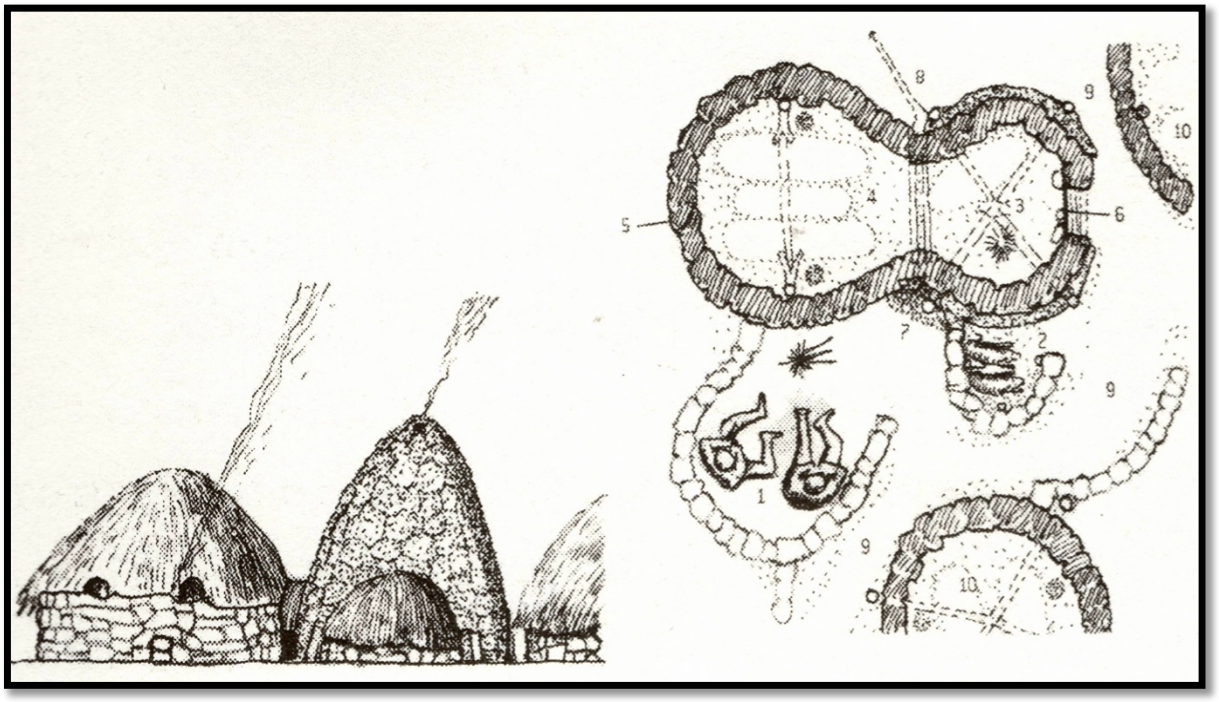
Sun Tzu, Fifth Century BC

CHAPTER ONE

The Foundation of Victorian Sappers

This is the story of unique Australian Army engineer units located in Victoria. Primarily established from the lessons learnt in World War Two, these units are also the custodians of a rich Sapper heritage.

This heritage has evolved and been built upon since the establishment of a young, isolated colony in an often-harsh environment of the mid 1800's. Even before colonisation, indigenous Australians used engineering principles to construct stone buildings and divert waterways to farm fish and eels. Some of these structures are over 30,000 years old.



A reconstruction of a Gunditjmara village. Western Victoria (Paul Memmott) (Pascoe P.128)

Victorian construction sappers must be able to operate in hostile environments, keeping our community safe whilst providing solutions to our nation's toughest challenges.

The great civilisations of antiquity utilised military engineering for both their military conquests and nation building. These endeavours can be traced to prehistoric times constructing simple barriers, through to much more sophisticated fortifications and defences as used by the Macedonian, Persian and Byzantium empires along with the great castles of the medieval period. Hadrian's wall and the Great Wall of China are enduring examples.

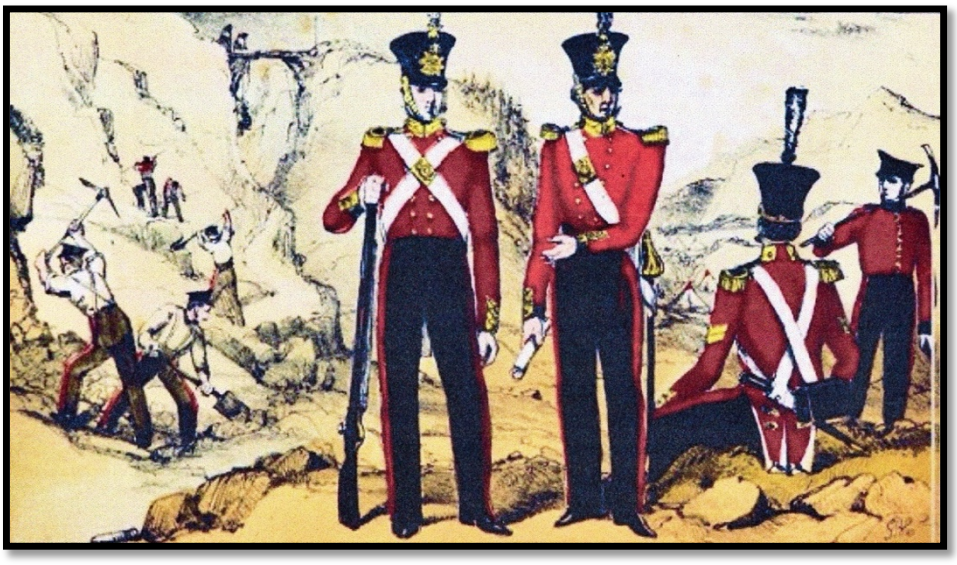


Roman bridge over the Sant Jordi torrent, "Puente de Cubelles", Pollença, Mallorca, Balearic Islands, Spain Built between 150 and 50 BC

Military engineering also includes infrastructure such as roads, bridges and aqueducts as built by the Romans.

Much historical influence came from Europe, particularly the Corps of Royal Engineers. The lessons learnt, and experiences gained from these early days, continue to be of vital importance to our country today.

To have available highly skilled and trained construction engineers and other professionals, able to respond to national priorities, both militarily and humanitarian, has proven critical in times of need. The officers and sappers of the supplementary reserve were drawn from a wide range of government instrumentalities and private industry. This need has not changed dramatically since these earlier times. The ADF needs civilian expertise.



The Royal Sapper & Miners in Britian were raised in March 1772 (Drawing from History of the Royal Sappers & Miners by Captain and Quartermaster, T.W.J. Connolly 1885)

1835 – 1860 Early Foundations

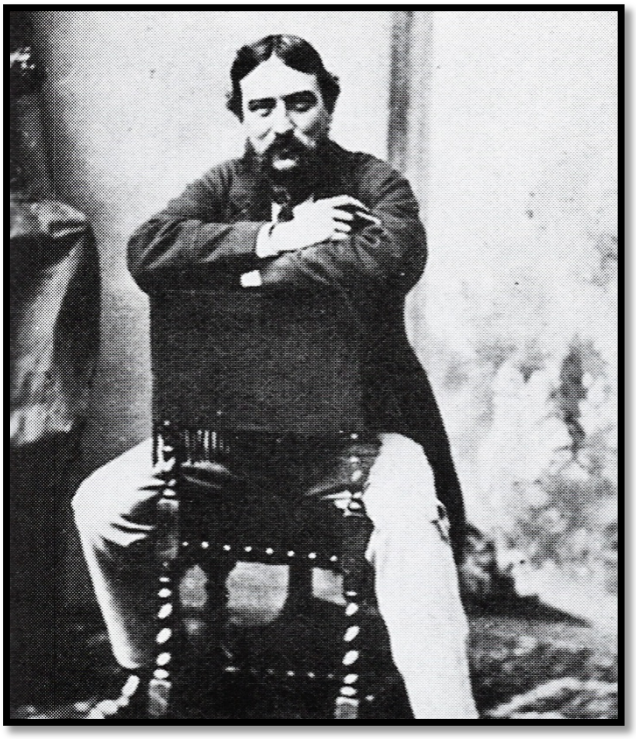
From 1835 to the end of the nineteenth century, numerous officers and soldiers of the Royal Engineers came from Britain and the Empire to serve in the Australian colonies. Many left their mark indelibly.

The first RE officer in Australia (by only a few hours) was Captain Roger Kelsall RE in Hobart Town, Van Diemen's Land on 10 December 1835. A senior captain, he was one year junior to Captain George Barney who arrived in Sydney on the following day.

Barney's assistant however, Lieutenant H.W. Lugard RE, had travelled separately in a convict ship *Hive* from Dublin, which never reached Sydney, having run ashore south of Jervis Bay, and arrived on the night of 10 December 1835. Lugard had set foot on New South Wales soil only a few hours after Kelsall had landed in Hobart Town and therefore was the second sapper officer to reach the Australian colonies (McNicoll p6).

With Victoria's separation from NSW in July 1851, coinciding with the discovery of gold, the new colony desperately needed engineers, the Victorian government sought military assistance.

Despite numerous attempts in appointing a Colonial Engineer, it was not until May 1853 that Lieutenant Andrew Clarke, who was in Hobart Town serving as private secretary to Lieutenant-Governor Sir William Denison, was invited by Lieutenant-Governor La Trobe to succeed Robert Hoddle as Surveyor-General of Victoria. This was a step in the right direction.



Lieutenant Andrew Clarke RE (Later Sir Andrew) (McNicoll p. 30)

Eventually the appointment of a Colonial Engineer in September 1853, went to Lieutenant Charles Pasley RE, son of General Sir Charles Pasley, one of the leading military engineers of his time and founder of the School of Military Engineering at Chatham in England. The young Pasley had served in Canada and Bermuda as well as on the staff of the Great Exhibition of 1851. He soon became absorbed in the urgent need for public infrastructure.



Lieutenant Charles Pasley RE Colonial Engineer (McNicoll p. 31)

Later in 1853, Captain Archibald Ross RE, arrived to report on the best measures for defensive works for the new wealthy colony.

Ross, his civilian clerk of works, and three men of the Royal Sappers and Miners, erected a prefabricated building at Jeffcott Street, West Melbourne – soon to be known as "Sappers Barracks".

Meanwhile, to assist with the colony's defences, a temporary barracks was built in 1852 for the 40th (2nd Somersetshire) Regiment of Foot (1759-1877). These barracks were located on the eastern side of St Kilda Road, on a site which now forms part of the Queen Victoria gardens.

With continued unrest and disturbances on the Ballarat goldfields in 1854, the 40th Regiment were involved in both foot and mounted roles against the miners at Eureka Stockade. Both Pasley and Ross deployed. After the surrender of the greatly outnumbered miners (Diggers) at Eureka, alleged butchering of the survivors continued by soldiers of the 40th Regiment who had become enraged by the earlier loss of their drummer boy.

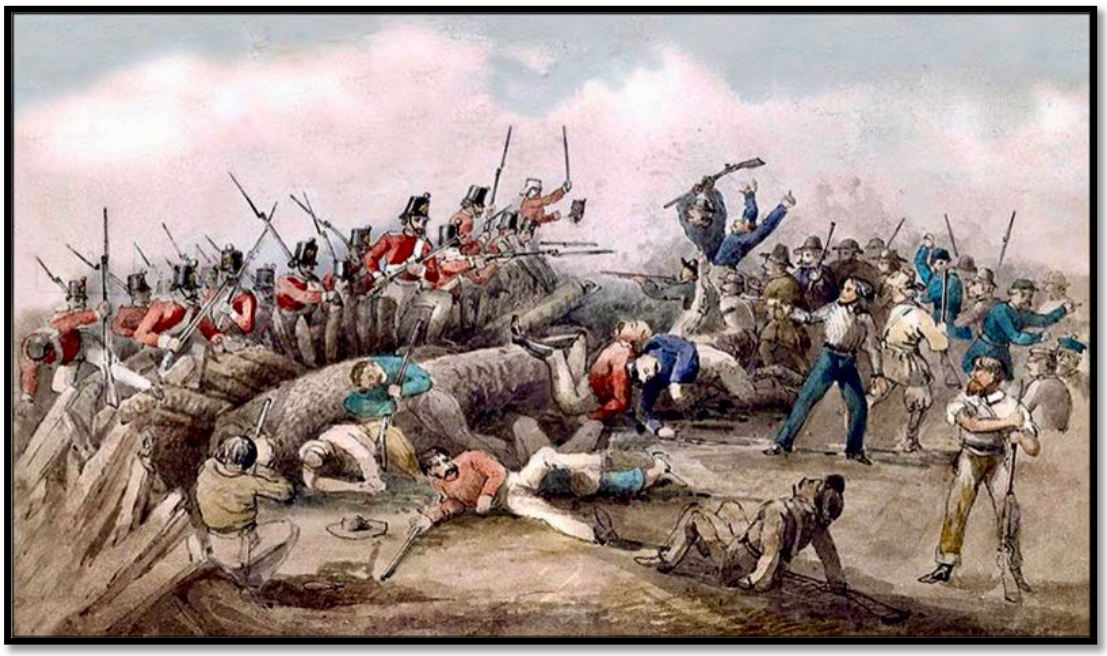
Pasley, the Second-in Command of the British Forces, sickened by the carnage, saved a group of prisoners from being bayoneted and threatened to shoot any Police or Soldiers who continued the slaughter *(warhistory.org).* Pasley's valuable assistance was acknowledged in despatches printed and laid before the Victorian Legislative Council. Pasley later served in the New Zealand wars and retired as a Major General. Ross and his staff returned to Britain.

Andrew Clark returned to England in 1858 leaving behind a solid record of achievement, not only in surveying, but he had also introduced local government, outlined the state railway system, installed the electric telegraph and founded the natural history museum.

Pasley's contribution was to include: The Houses of Parliament, the Treasury, Custom House, the General Post Office, Pentridge Gaol, the Lunatic Asylum and Victoria Barracks. He was also, a director of the Melbourne, Mount Alexander and Murray River Railway Companies.

His further appointments included chairman of the Roads Board, member of the Board of Science, committee member of the Zoological Gardens, a water supply commissioner, President of the Melbourne Philharmonic Society and the first patron of the Victorian Institute of Architects. Pasley was also elected to the first Legislative Assembly in 1856.

Defence and fortifications however, remained a high priority for the young colony. Numerous proposals on defences and fortifications were considered but not fruitful, due to expense or non-availability of Royal Engineer officers and men.



40th Regiment at Eureka Stockade 1854 (Australian Geographic)

1860 Captain Scratchley - Duke of Rothesay Hotel

.



Captain Peter H. Scratchley (McNicoll p.31)

In 1860 however, Captain Peter H. Scratchley and twenty-one Sappers of the Royal Engineers arrived from India.

Captain Scratchley (later Major-General Sir Peter Henry), an officer of great ability, had recently been employed with the construction of the Sea Batteries at Portsmouth in England. He had served in the Crimean War and the Indian Mutiny. Mostly, his service had been with the 4th Company Royal Engineers (formerly the 4th Company Sappers and Miners - who had by then merged with the Royal Engineers).

The volunteer movement in Victoria had begun in 1854 with the *Volunteer Corps Act* raising several rifle corps, followed by yeomanry (cavalry) and artillery. The impetus came from the threat of war between Britain and Russia, which eventually culminated in the Crimean War.

A deputation of seven Melbourne gentlemen urged the minister in charge of the Victorian Army and Navy to raise a unit of volunteer engineers. Captain Scratchley, the Victorian Government's advisor on defence works, was present. The inaugural meeting was held at the Duke of Rothesay Hotel (on the eastern side of Elizabeth Street between Flinders Street & Flinders Lane) on 15 November 1860.



Duke of Rothesay Hotel 1860 site of the formation of the Corps of Volunteer Engineers in Victoria

The photograph shows the hotel 60 years later (1920) (McNicoll p.47)



Plaque recognising the 112th Anniversary of the formation of the Volunteer Engineers in Victoria.

So, the first Corps of Volunteer Engineers was formed in a pub in Melbourne and was to eventually become the Corps of the **Royal Australian Engineers**.

A plaque was placed on the wall of the existing building at 24 Elizabeth Street Melbourne where the original Duke of Rothesay Hotel stood to mark the 112th anniversary of the formation of the **Volunteer Engineers** in Victoria. The unveiling ceremony on Sunday 12th November 1972 included a parade of then serving Victorian RAE members

The public meeting was held on 15 November 1860 and subsequently, the rules and regulations of the Victorian Volunteer Engineers were gazetted in March 1861, and included:

1. ***The corps shall consist of architects, civil engineers, surveyors, their assistants and mechanics connected with the above professions exclusively.***

2. ***The constitution of the corps to be military, and its drill and duties to assimilate those of the Royal Engineers.***

3. ***Each candidate for admission to be proposed and seconded by members of the corps.***

4. ***The corps shall be under the direction of the senior officer of the Royal Engineers in the Colony.***

Victorian Engineers - A Heritage of Fortifications & Public Works

The Corps of Royal Australian Engineers (RAE) traces its immediate origins to the Volunteer Engineer Corps raised in the Australian colonies. The Port Philip District of New South Wales was promulgated as the Colony of Victoria on 1 July 1851. This coincided with the first gold rushes at Warrandyte and Clunes. Later, gold rushes in the Bendigo and Ballarat regions of the new colony, would see great wealth and prosperity descend upon Victoria.

The Colony needed not only civil works but also defensive works. Because of these initial, and later, gold discoveries, the colony was an attractive target for aggressive foreign powers. Major General Ronald McNicoll CBE, the RAE Corps Historian, astutely recorded the birth of the Victorian Sappers in the first volume of the official Corps History 1835-1902: *The Colonial Engineers.*



Officers of the Victorian Volunteer Engineers 1861 (Photo by Batchelder & O'Neil) (McNicoll p.78)

At this stage none had been commissioned

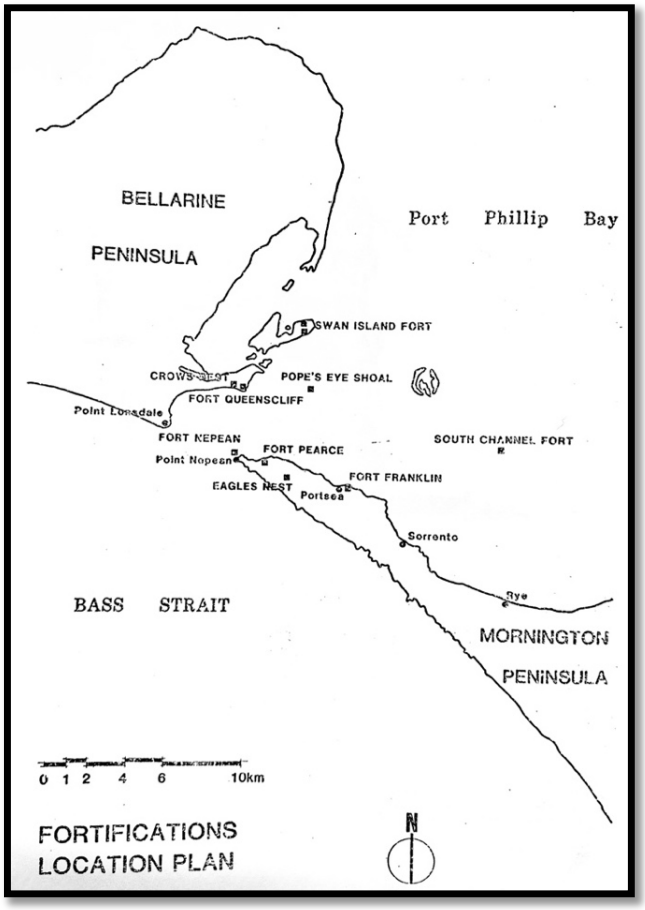
"*These colonial engineer corps counted themselves as successors to the units and individuals of the Royal Engineers and the Royal Sappers and Miners who contributed so much to the early development of Australia."*

Fort Queenscliff, dates from 1860 when an open battery was constructed on Shortland's Bluff to defend the entrance to Port Philip Bay. The Fort, which underwent major redevelopment in the late 1870s and the 1880s, became the headquarters for an extensive chain of forts around Port Philip Heads. Its garrison included volunteer artillery, engineers, infantry and naval militia, and it was manned as a coastal defence installation continuously from 1883 to 1946.

The other fortifications and armaments around the Heads were completed by 1891. Victoria boasted some of the most elaborate coastal fortifications in the southern hemisphere: Fort Nepean, Fort Gellibrand, Fort Queenscliff, Swan Island and the South Channel Fort. Because of the scope of these works, Scratchley was involved in the design and supervision of the construction of coastal defence works for most of the major Australian ports including Port Philip Bay.

Sir Peter Scratchley is regarded as the founder of Australia's first Volunteer Engineer Corps.

Founded in 1860, the Victorian Volunteer Engineer Corps was followed in other States: The New South Wales Engineers, 1869 to 1902; The Torpedo and Signal Corps (Victoria), 1870 to 1882; The Queensland Engineers, 1876 to 1902; The Torpedo and Signalling Corps (New South Wales), 1878 to 1893; The Torpedo Corps (Victoria), 1882 to 1888 and The Tasmanian Engineers, 1883 to 1902. Western Australia Fortress Engineers were formed in 1910.



Source; A History of Fort Queenscliff

by Mr Jim Tate 1982

The Role of Engineers

Current Victorian Engineers share a pedigree and heritage with the Victorian Colonial Fortress Engineers along with the Submarine Miners and the Searchlight Companies who established and have protected Victoria since the mid 1800's.

Along with combat, forestry, quarrying, electrical, mechanical, tunnelling, postal, transportation, railway and maritime engineers of the 20th century, the current units have a rich historical foundation on which to build their current skill sets into the future.



Since European colonisation of our continent, Australia has been involved in many conflicts. There were early expeditionary forays to numerous conflicts such as the New Zealand Wars (1860s), the Sudan (1885), the Boer Wars (1899-1902) and the Chinese Boxer Uprising (1899-1901). The 20th Century brought World War One (1914-18), where Sappers led the troops storming the beaches of the Gallipoli peninsula and later tunnelling under the battlefields in France.

Sappers from Victoria have proudly represented our country in all conflicts in the 20th century: Including World Wars One and Two; the Japan Occupation, Korea, Malaya, Borneo, Vietnam, Iraq and Afghanistan along with a multitude of peacemaking, peacekeeping, humanitarian, security and relief operations both at home and abroad.

The nature of these conflicts has changed dramatically, as has the military engineering response to them. Fundamentally however, the theoretical employment of sappers has remained unchanged and provides **mobility, counter mobility and survivability solutions to the ADF.** Sappers also provide essential services and infrastructure such as water, electricity, roads and airfields.



Combined with this role, the Royal Australian Engineers have further responsibilities as a combat arm. Engineers are required to be able to fight in the role of infantry and are also responsible to Navy and Air Force for beach information, the construction of airfields and sea terminal facilities and the provision of construction materials. (The Royal Australian Engineers, "Who are we" Australian Army, 22 Sep 2014).

Strategically, military engineers have a vital role in promoting national interests by providing engineering solutions:

***"A ready and resilient Army and Nation is kept ready through its Engineers. We exist to provide engineer solutions for our Nation's toughest challenges. Our mission is clear – to promote national interests, influence vital regions and enable the Joint Force to live, move, fight, and win our nation's Wars**". (army.gov.au/royalaustralianengineers)*

Principles of Defence - Fortification Models

A magnificent display of early fortification models adorns the walls of Oakleigh Barracks. These were used to instruct on the principles of military fortification and defence and were originally located at the Swan Street Engineer Depot in Richmond. Lovingly refurbished by WO1 Bill Fry in the 1990s, these models are some of the best examples in the world. Victoria's fortifications, particularly along the coastline and protecting Port Philip Bay, gave the Colony the title of the most heavily defended in the Southern Hemisphere. Port Philip was known as the "*Gibralter of the South*."



Models of Military fortifications at Oakleigh Barracks

CHAPTER TWO

The Orderly Rooms, Barracks and Depots of Melbourne

Victorian sappers utilised various temporary and permanent facilities in and around Melbourne to conduct meetings, training and administration. Some were early prefabricated dwellings, some were temporary, some became rich iconic places of important social and professional gathering. They provided a rich heritage tied intrinsically to a booming Melbourne

Since humble beginnings in 1837 when Melbourne was declared a town, it expanded quickly primarily due to significant wealth created from the discovery of gold in the 1850s.

Melbourne is currently (2025) an internationally acclaimed city of 5.35 million with a well-preserved and rich architectural heritage. The city is also famous for its wonderful gardens and park lands.

Whilst fortifications were being established and enhanced to protect Victoria, facilities and infrastructure to accommodate its volunteer engineers evolved along with the expansion and growth of the city.

Melbourne Volunteer Engineers Orderly Rooms, Barracks and Depots.

Royal Princes Barracks, East side St Kilda Road 1852 - 1853

Sapper Barracks, Jeffcott Street, West Melbourne 1853 - 1864

Victoria Barracks, West side St Kilda Road 1856 to present

Duke of Rothesay Hotel (Original Meeting Place), 15 NOV 1860

Beehive Hotel, 1861-1863

Lygon Street, 1864-1868

Southbank, 1869-1875

Jolimont, 1875-1890

Alexandra Avenue, 1890-1934

Swan Street, Melbourne 1935-1991

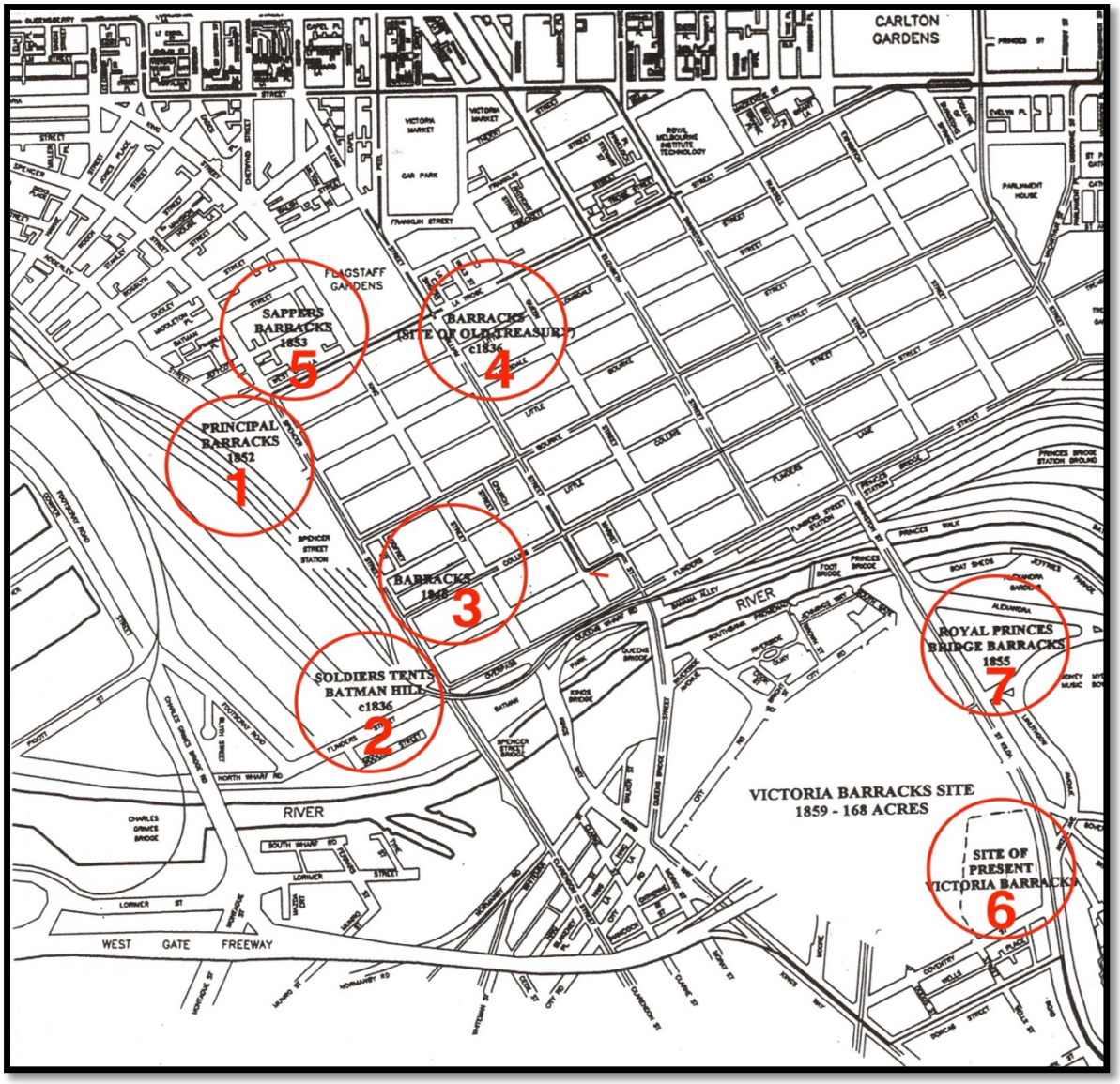
Abbotsford, Marine Parade 1948-1964

Ringwood, Station Street 1949-1956

Ringwood East Training Depot, 1956 to present

Oakleigh Barracks, 1991 to present.

Barracks in Melbourne before 1864



Barracks in Melbourne before 1864 were located in various parts of the town but the first temporary '*Sapper Barracks'* were erected in Jeffcott Street, West Melbourne constructed by Captain Ross and his team in 1853.

"*Orders had been received from the Ordnance Department in Sydney for the immediate erection of military barracks at Melbourne. These barracks were intended to form the headquarters of a regiment and were erected on the West side of Spencer St, between Latrobe and Little Lonsdale Streets* **(1)** *which were occupied by the Engineers, who later moved to the Immigrants Home on St Kilda Road." (Royal Princes Bridge Barracks),* **(7)**

The Imperial troops were first quartered in tents on the North side of Batman Hill **(2).** An old map of Melbourne shows the site of "barracks" diagonally across the site of the present

intersection of Collins and King Streets **(3)**. Shortly after, (between 1830 and 1840) the Government buildings were located West of this site, in the block bounded by Collins, Spencer, Little Collins and King Streets**.** The barracks in this spot were in the old jail (pulled down after 1870)."

The next barracks constructed were located on the East side of William Street ***(4)***, between Lonsdale and Little Lonsdale Streets, where troops were stationed to act as guards for the Government offices in that area. One of these offices was the Treasury where much gold was held.

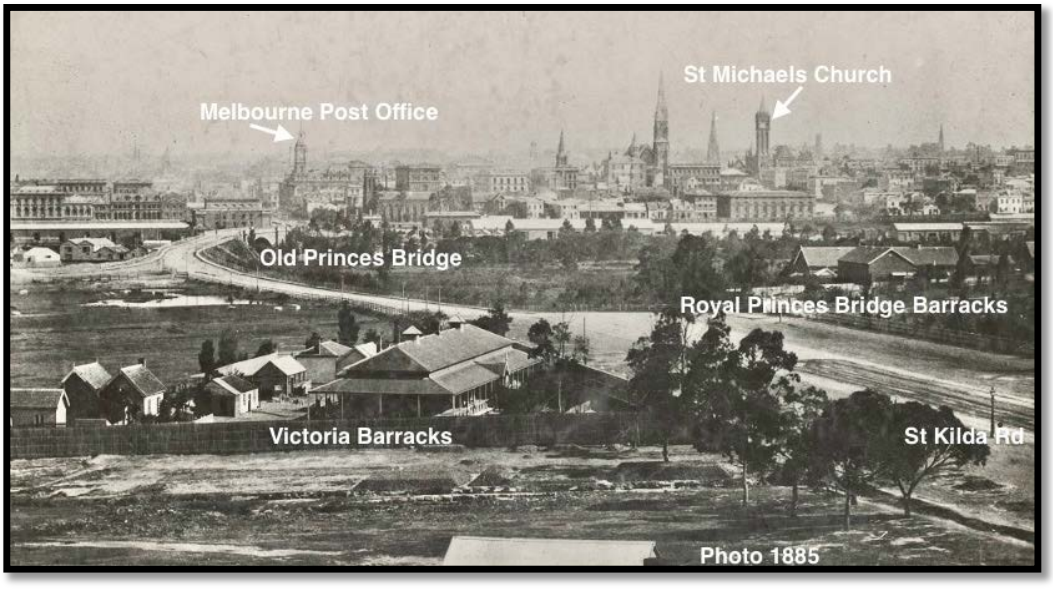
The barracks in Spencer Street ***(5)*** were the next to be erected. These were disposed of piecemeal to other departments between 1862 and 1865.

A scheme for the general reorganisation of Victoria's defence was produced and plans for a new barracks were drawn up. By Order in Council of the 9th of May 1859 a military reserve consisting of 168 acres was set aside. This area was bounded as follows:

"*Commencing at the point of intersection of the East line of Moray Street with the South line of Sandridge (now City Road), the along the East line of Moray Street bearing S28º East for 480 Links (96.5m), then by line S60º 25' for 3870 Links (778.5m), then in a line bearing N79º 35'for 1420 Links (285.6m), then West by boundary of St Kilda and Brighton (now St Kilda) Roads and the South boundary of the Sandridge Road to the point of commencement*"

When the Victoria Barracks ***(6)*** were first erected (at a cost of £86,000) the area to the West and South of the present barracks, which was part of the area reserved, was a swamp. The barracks (now "A" Block) once established presented a classic example of the architecture of the bluestone period. Behind the main building was the barracks square. To the rear of that block (now called "G" Block) housed the early soldiery. The bluestone walls were not loop-holed, but castellated bastion-like bluestone projections sat either end of the Western side.

For recreation soldiers from Victoria Barracks would often spectate and shout support for Australian Rules football matches played in adjacent park lands. This is the origin of the uniquely Australian term "Barrackers".



1885 photo looking North of the Victoria Barracks and Princes Bridge Barracks

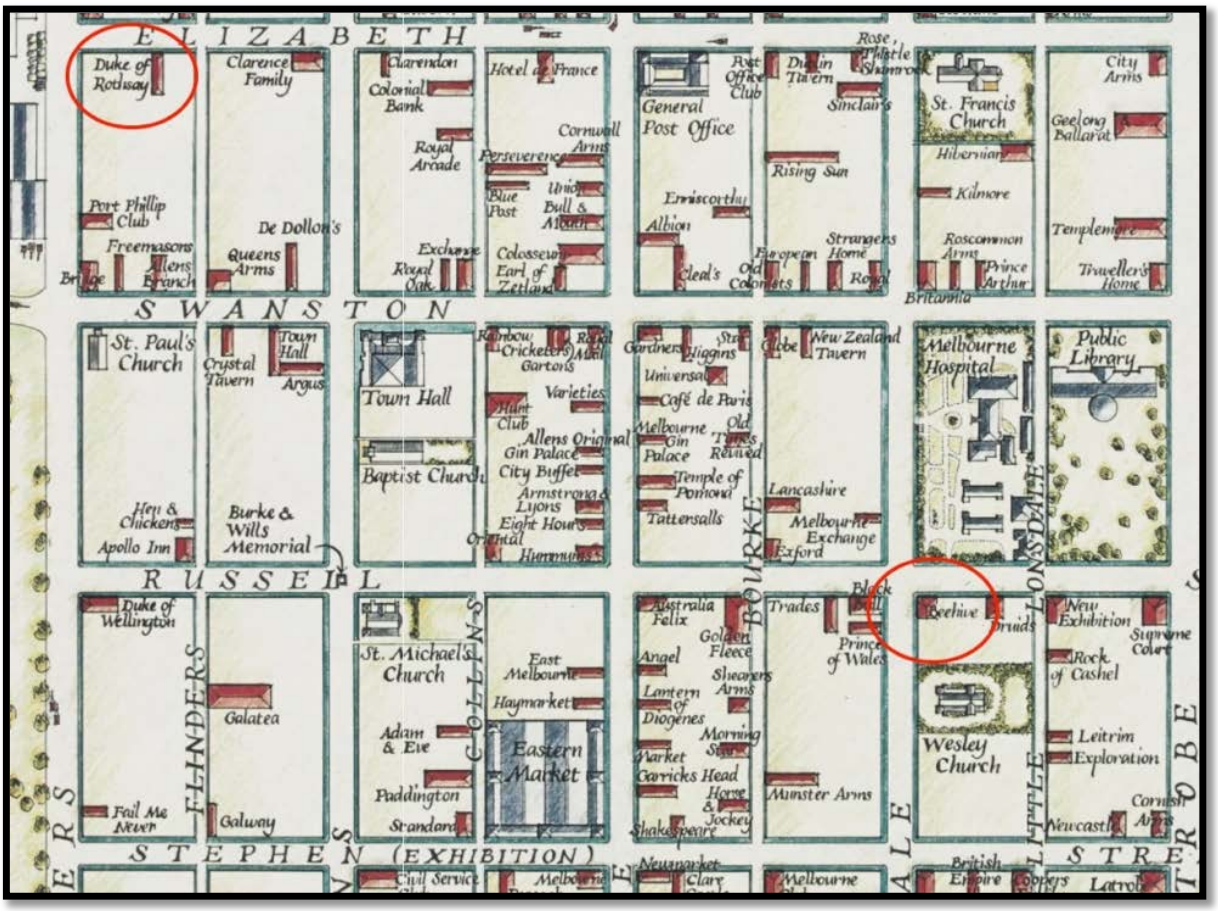
1861 – 1863 The Beehive Hotel

In 1861, the Victorian Volunteer Engineers established an Orderly Room in the Beehive Hotel, at the north-eastern corner of Russell and Lonsdale Streets. Now located in Barkers Road, Hawthorn, the original Beehive Hotel was established in 1855 and was named after the Irish Village home of the hotelier.

At the time, unit training including making fascines and took place on an adjacent allotment. Fascines are rough bundles of brushwood used to strengthen earthen structures, construct pathways across wet or uneven terrain, or to cross obstacles such as creeks or rivers. They can also offer protection from view and have been used since Roman times by military engineers.

An advertisement in the 'Argus' newspaper, 22 & 25 September 1863 reads.

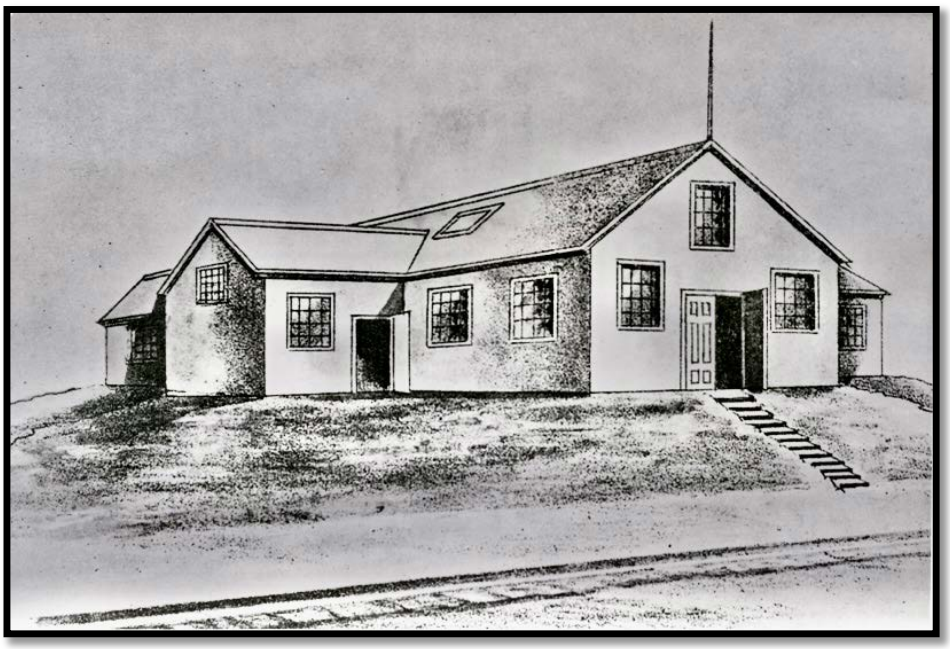
"*Persons desirous of being enrolled in this Corps are hereby informed that it consists of architects, surveyors, civil, mechanical and mining engineers, their assistants and mechanics connected with the above professions*". Recruiting was conducted at the Beehive Hotel, Lonsdale Street West *"every evening from 7.30 to 9 where the staff-aide will be in attendance to receive the names and afford information to new members".*



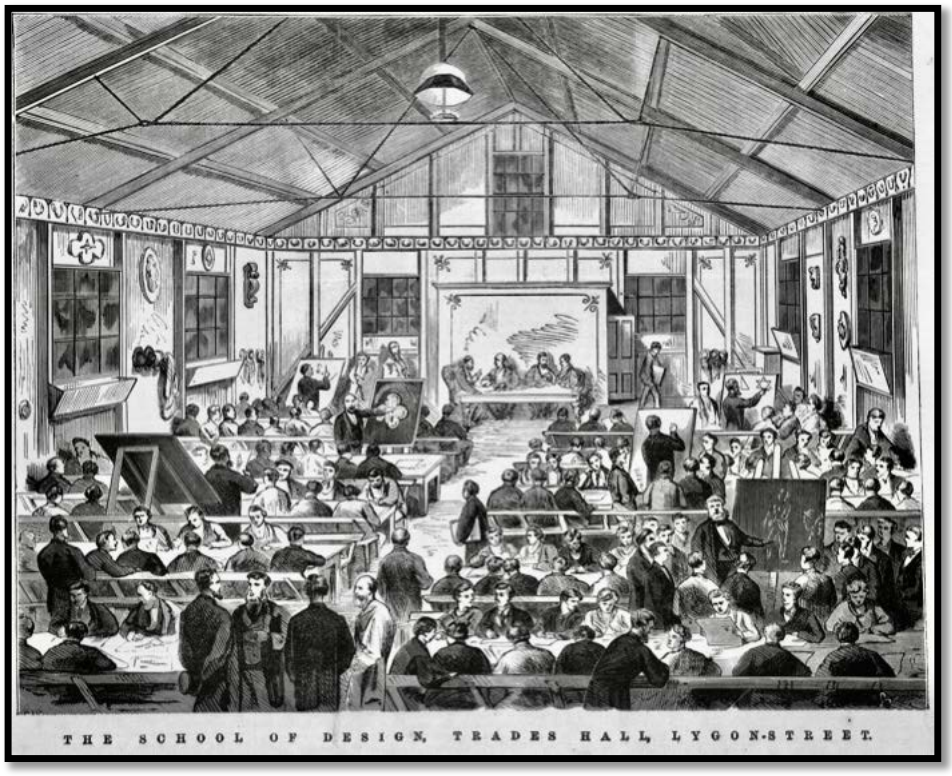
Melbourne Circa 1861

1864 – 1875 Lygon Street, Carlton (First Permanent Site)

Shortly afterwards in 1864**,** the first permanent Australian military engineer depot was established for the Corps of Victorian Volunteer Engineers in Lygon Street, Carlton. This site was later annexed to the ***Trades Hall and Literary Institute***. Along with the Corps headquarters, training was based at this site until 1868 when the Corps was granted a ten-acre site at Jolimont (Wellington Parade). The headquarters moved to Jolimont in 1875.

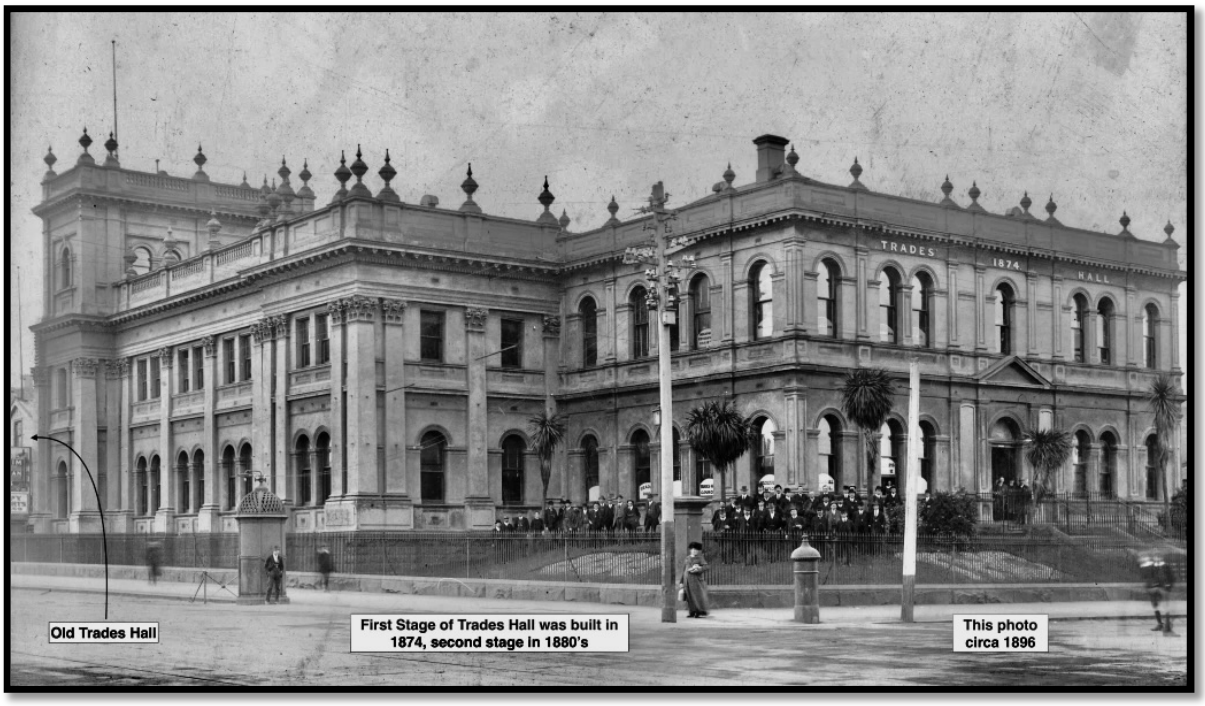


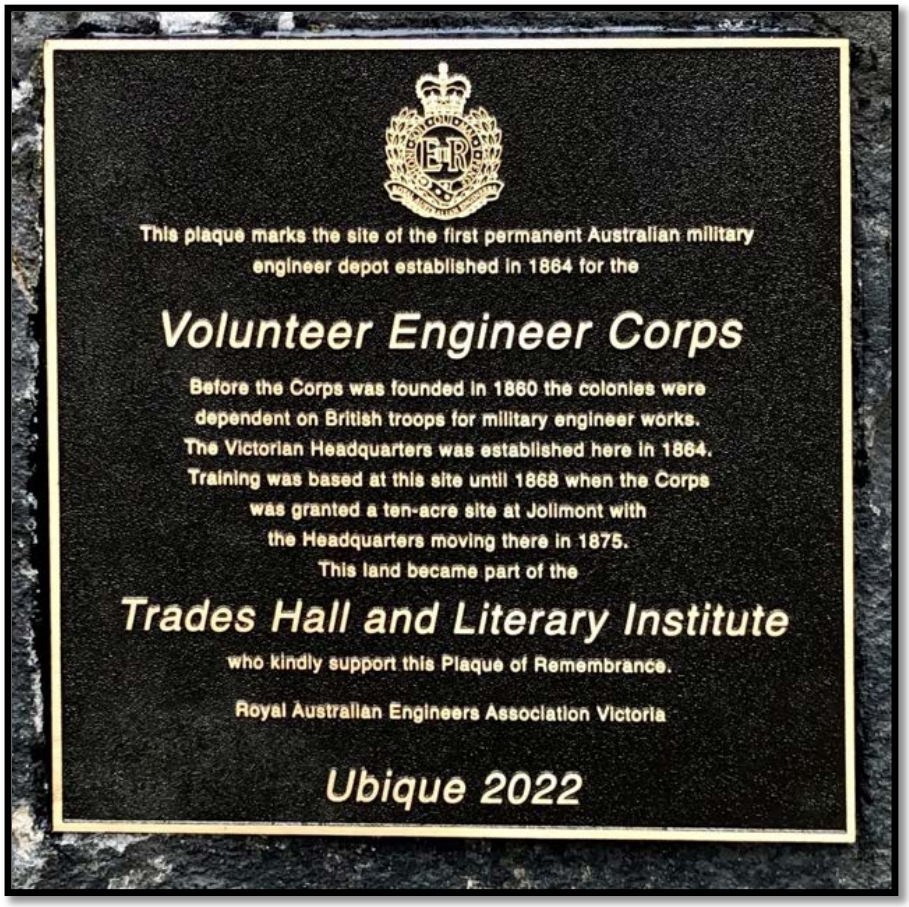
Corps of Victorian Volunteer Engineers Orderly room in Lygon Street, Carlton, 1864-1875



Interior of orderly room after being annexed to Trades Hall

Circa 1896



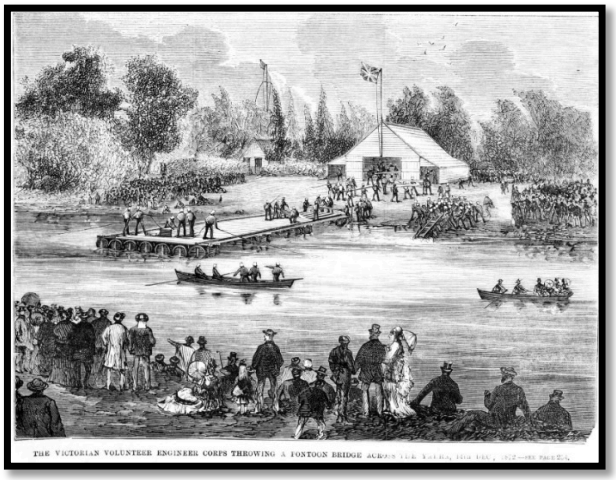


Plaque erected on site in Lygon Street, Carlton

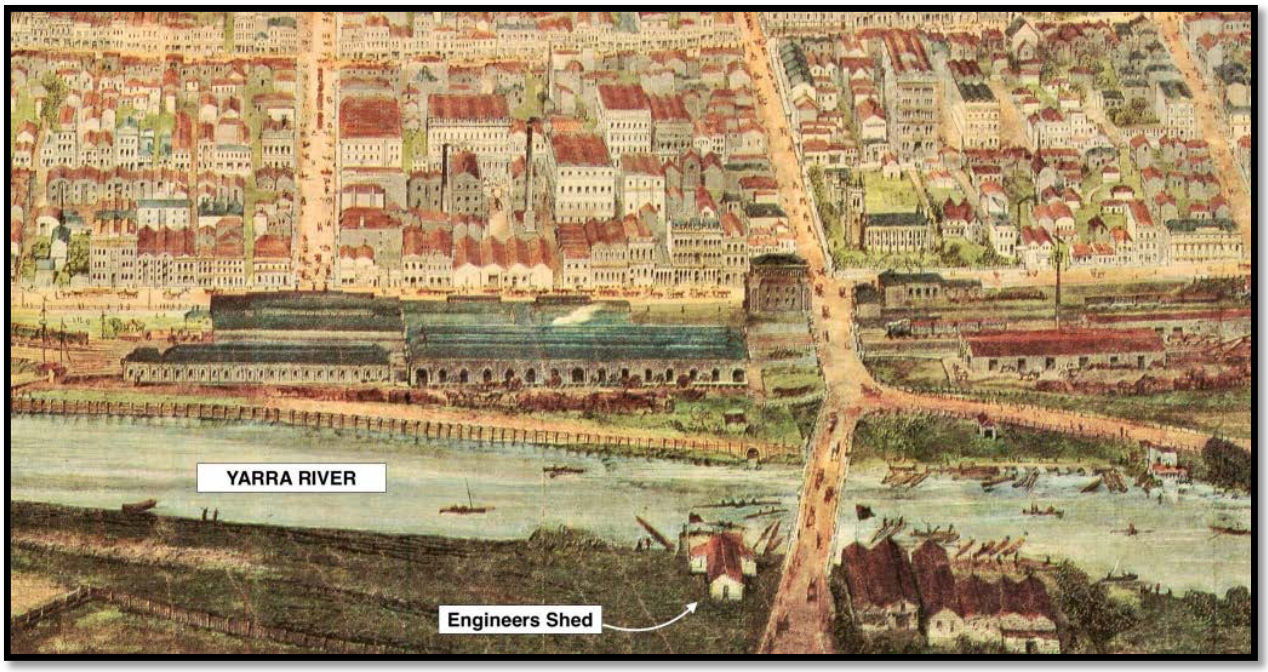
1869 – 1875 South bank on the Yarra

1869 saw a pontoon shed built on the south bank of the Yarra upstream from Princes Bridge for watermanship and bridging training. In 1871 the shed was removed by the Government to make room for the embankment of the ornamental lake which forms a portion of the Government House domain.





Pontoon shed on south side of the Yarra near Princes Bridge

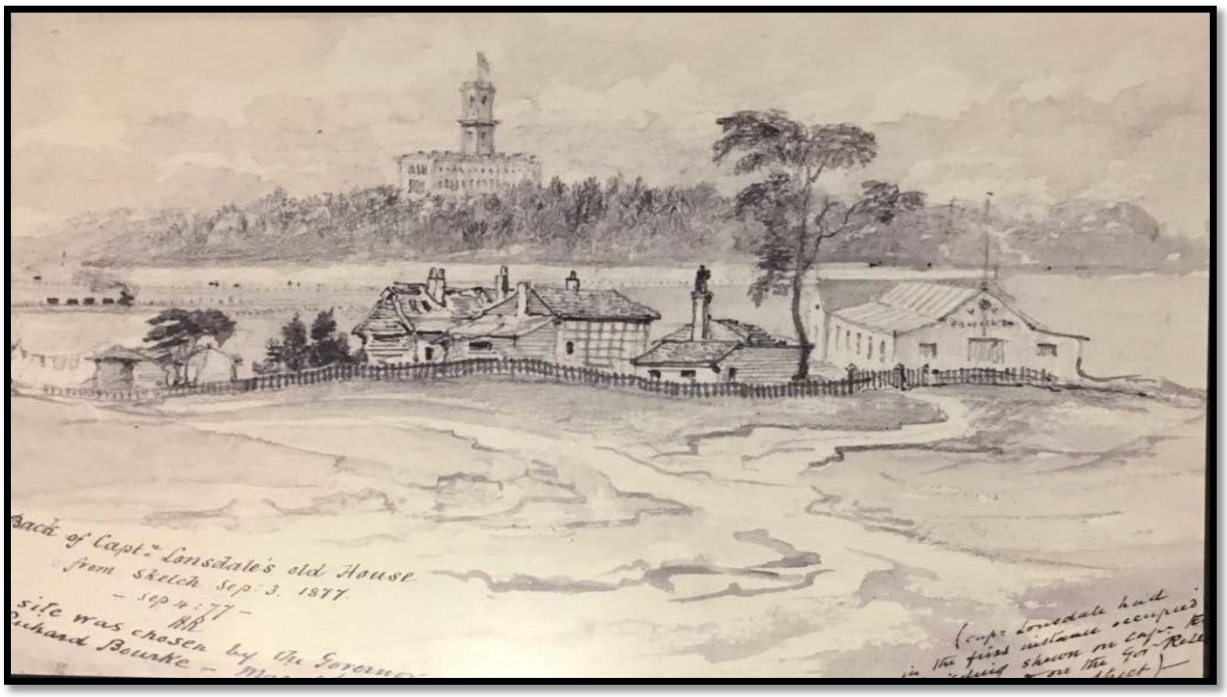


1868 – 1891 Jolimont

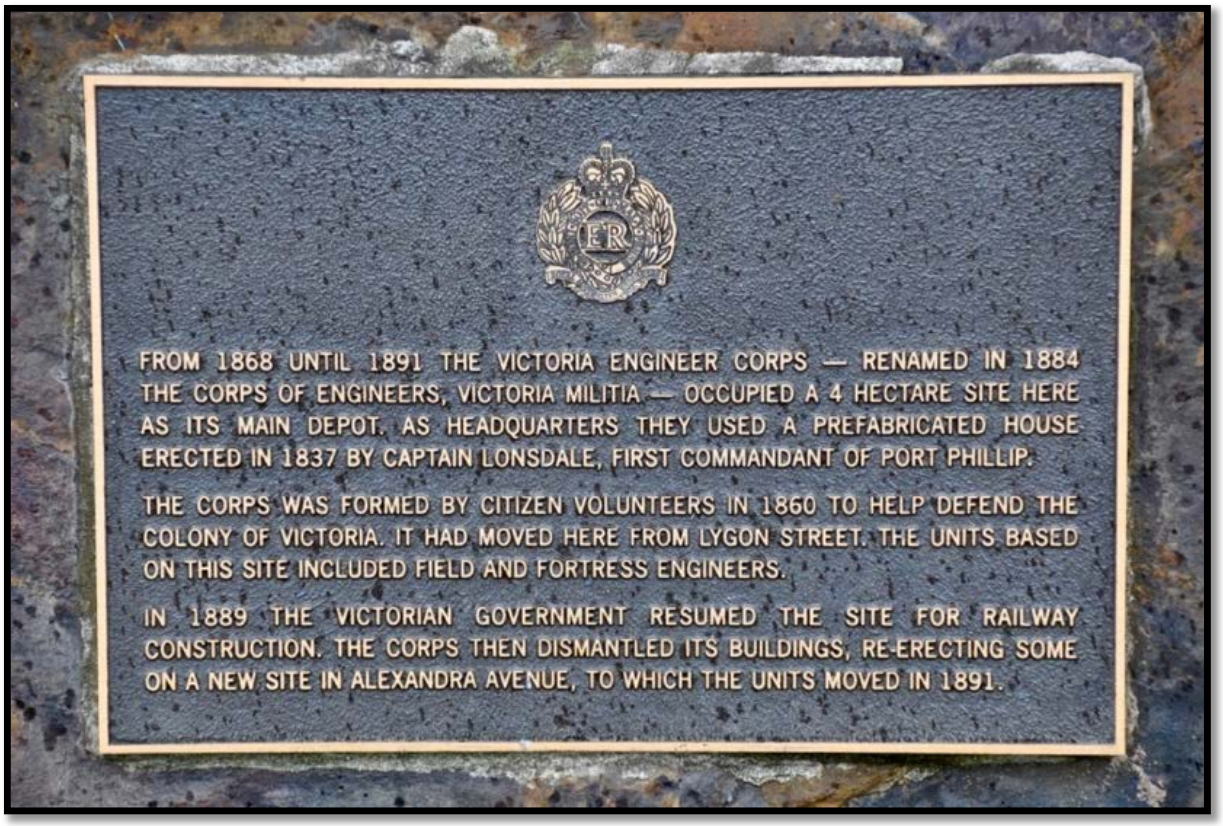
The pontoon shed was re-erected and enlarged on the other side of the Yarra, adjacent to Captain Lonsdale's old house (Founder of Port Philip and first Colonial Secretary of Victoria) in Wellington Parade South. Jolimont was by now being used by the Victorian Engineers as an Orderly room after moving from Lygon Street.

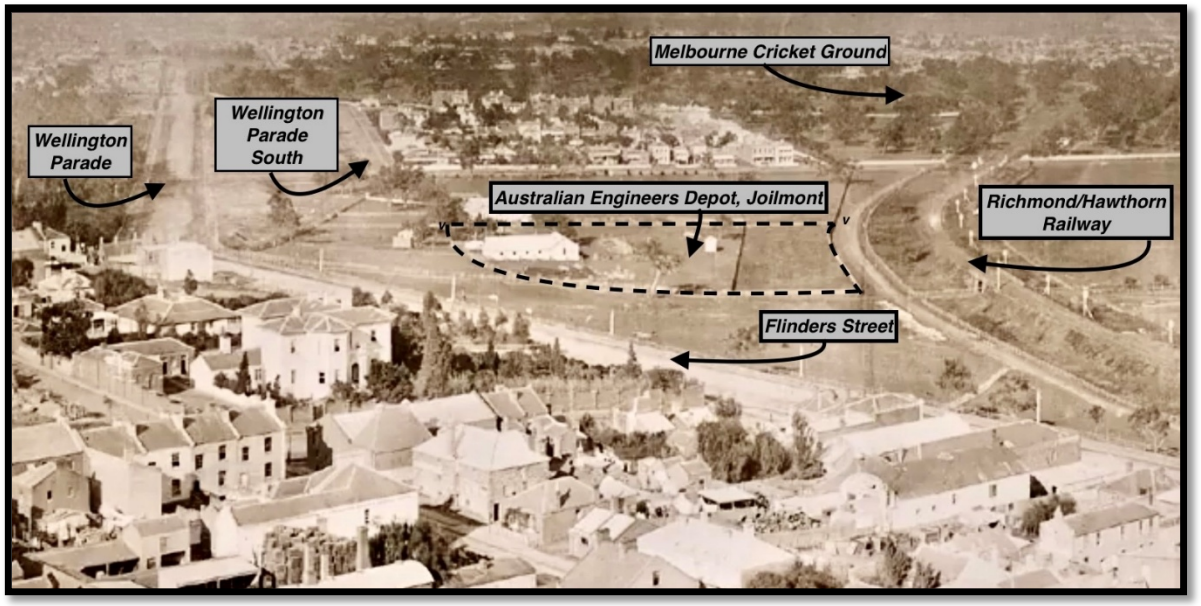
This had originally been Captain Lonsdale's house built for him in 1854 which was a prefabricated house built by the Royal Engineers in Sydney and shipped to Melbourne. It was used as the Corps Headquarters. There was a horse paddock, parade ground and training area.

In 1889 the Victorian Railways system was expanding, and the State Government decided the site was required for railway purposes and therefore it was time to move again, this time to Alexandra Avenue back on the South side of the Yarra.



Shed rebuilt next to Captain Lonsdale's house





Jolimont Plaque in Wellington Rd South

1884 Corps of Engineers, Victorian Militia

In 1870 the Victorian Government established a separate Torpedo and Signals Corps but in 1875 they transferred to the Engineer Corps. By 1876, four of the six colonies (New South Wales, Victoria, Queensland and Tasmania) had raised their own engineer units. In 1884 the name changed to the Corps of Engineers, Victorian Militia.





1891 – 1934 Alexandra Avenue, Melbourne

The Corps moved to Alexandra Avenue in 1891, back on the southern side of the Yarra River about 200 metres east of where the old Pontoon bridge and shed had been. The Jolimont buildings were moved once again, they had been used as a boat shed for sapper training since 1868. It eventually included a large parade ground, HQ buildings, staff housing, stables, machinery sheds and magazine.

The Victorian Engineer Corps officially took occupancy of the Alexandra Avenue Depot on 17 July 1894. The Corps moved to Alexandra Avenue, Melbourne together with their buildings from the Jolimont site on Wellington Parade South.

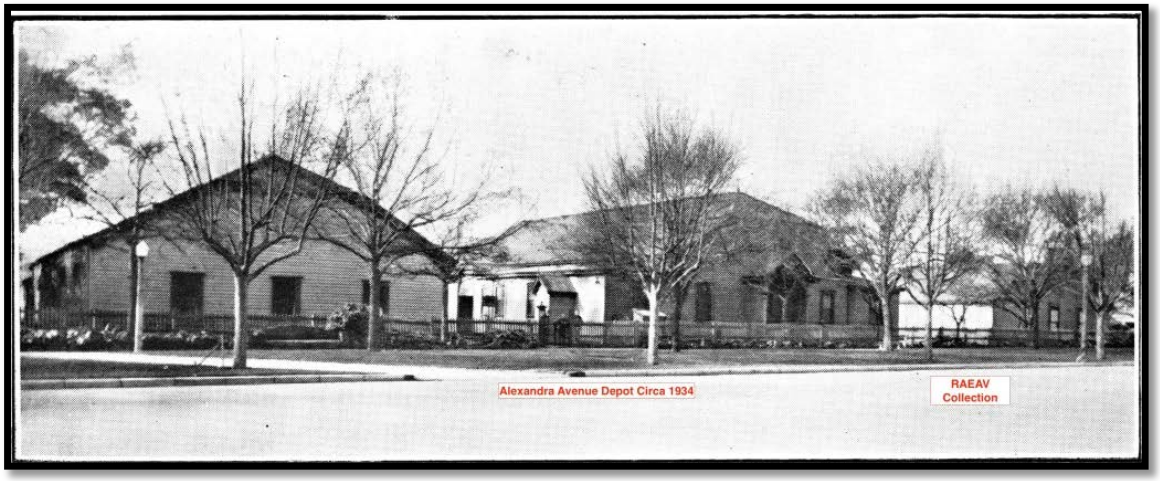
Many notable units were formed at and occupied the Alexandra Avenue Depot over the years from 1894-1935 including 2,4,6,8,10 and 15 Field Companies, 21 and 26 Signal Troops, 34 Electric Company (searchlights), 34 Fortress Company and 38 Submarine Mining Company (later 38 Fortress Company), 3 and 4 Field Park Companies and 10 Independent Field Squadron together with a number of AIF units that were also formed to serve in the 1914-18 War.

The Honour Rolls for 34 and 38 Fortress Company members who served in WW1 hang on the walls of the Oakleigh Barracks.

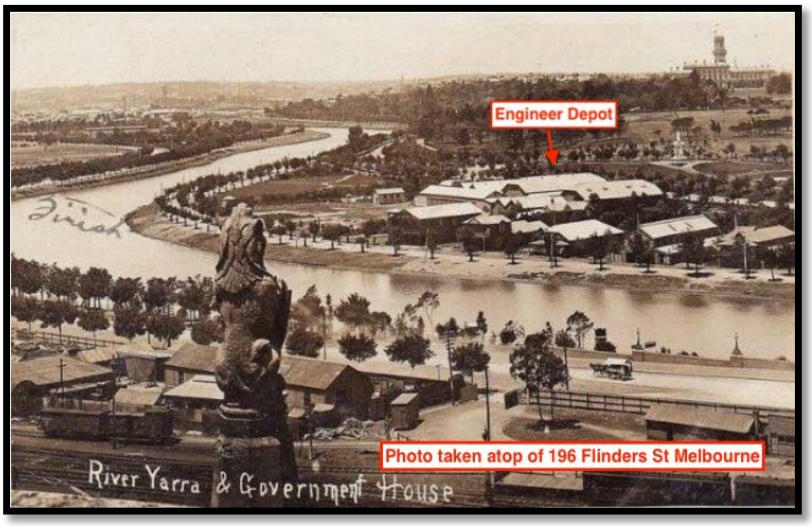
In 1935 after 41 years the Corps once more had to relocate, this time to the then new Swan Street Barracks in Richmond as the Government again wanted the land, this time to extend the Alexandra Gardens, and this was suitably celebrated by the newly formed Old Sappers.

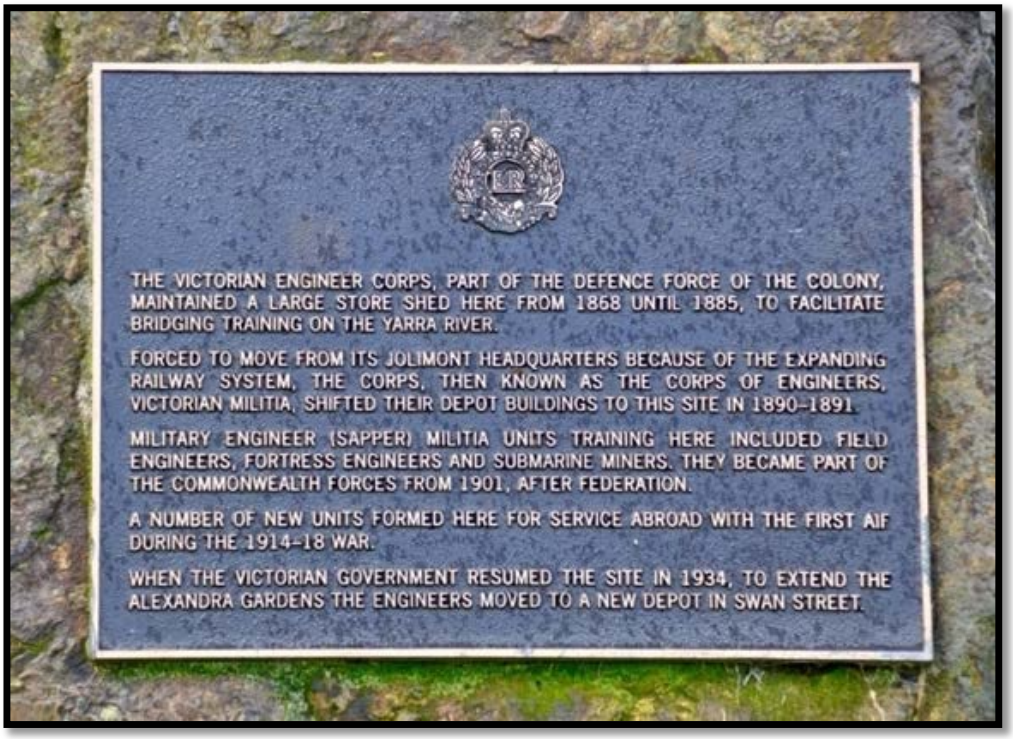






Alexandra Avenue Depot





1935 – 1991 Swan Street, Melbourne

In late 1934, we find the engineers moving from their home of forty years in Alexandra Avenue alongside Princess Bridge to a new site, some 2.5 hectares, a kilometre away between Batman Avenue and Swan Street. The move was marked by an evening march by troops, led by a band, from Alexandra Avenue to Swan Street.

On 22 September 1934 a reunion called *"A Farewell to the Old Depot"* was arranged by the newly formed *Old Sappers Association* to celebrate the Alexandra Avenue Depot as being part of our proud Victorian sapper history.

The *Old Sappers Association* operated from 1934 until 2014 when it merged with the *Royal Australian Engineers Association of Victoria (Incorporated*).

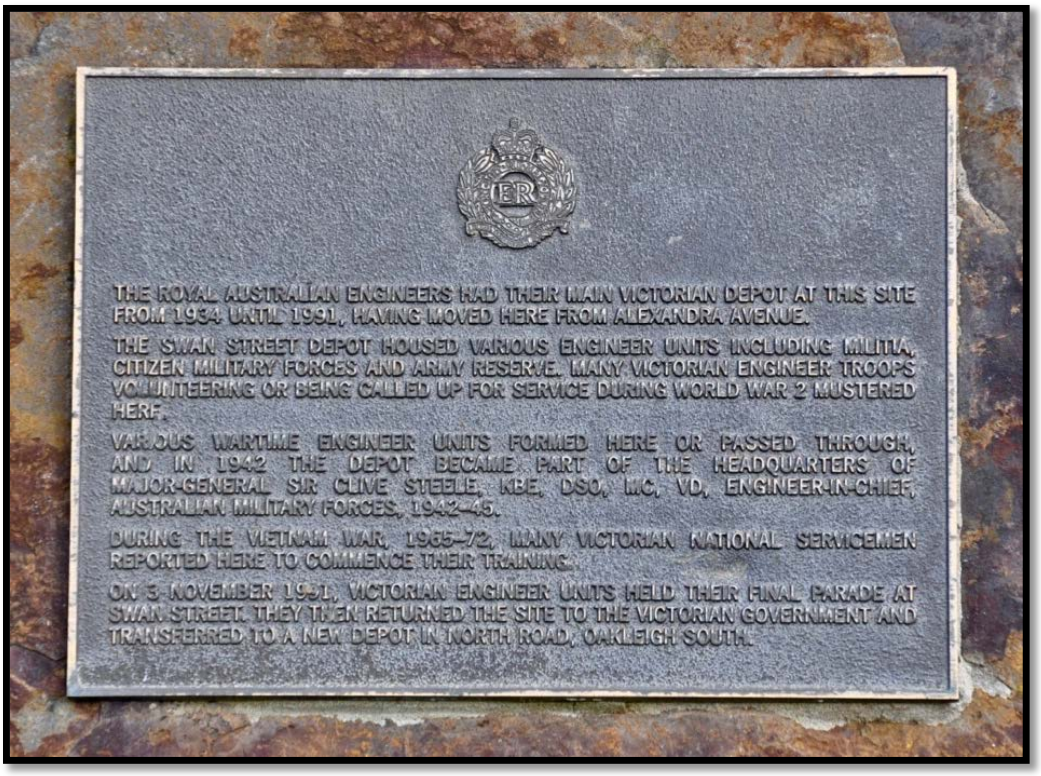
The Swan Street Depot had housed various Engineer units including Militia, Citizen Military Forces and Army Reserve.

Many Victorian Engineer Troops volunteering or being called up for service including National Servicemen mustered there.

Other uses of the depot grounds were for the Olympic Games 1956, Commonwealth Heads of Government Meetings (CHOGM) and various mess and social club activities.

The Swan Street Depot was eventually demolished in the mid 1990s, to make way for the City Link works and 22 Engineer Regiment now has three depots at Oakleigh, Ringwood and Newborough





Plaques erected outside Olympic Park (now AAMI Park)



1991 to present - North Road, Oakleigh

The development of the Oakleigh Barracks was driven primarily by the requirement to vacate the Batman Avenue/Swan Street Depot in accordance with a Commonwealth/State Land Transfer Agreement. It also formed part of a wider rationalisation of Defence property holdings, particularly Army Reserve facilities, in the Melbourne metropolitan area. Some Reserve depots were old and inappropriately sited, reflecting earlier demographic distributions which no longer applied. These plans aim to optimise utilisation of facilities by co-location of like units and shared use of facilities. The provision of multi-user Army Reserve depots shared by several units, such as the Oakleigh Barracks, leads to a reduction in administrative overheads and is both cost efficient and flexible.

The Oakleigh Barracks, formerly the site of the Oakleigh Municipal Abattoirs, initially accommodated Headquarters 6 Construction Group, 22 Construction Regiment, 91st Forestry Squadron, 4th Field Supply Company, 1st Petroleum Company and 105th Field Workshop.
In 1992, 6 Construction Group reformed as HQ Logistics Support Force Engineers, on 1 July 2002 it came under control of Land Command Engineers. On November 2014, 22 Construction Regiment became 22 Engineer Regiment.



The Opening Day Programme

Other Victorian Engineer Depots, Barracks, Schools & Colleges

Marine Parade, Abbotsford 1948-1964 (No Image Available)



Railway Avenue (Station Street) Ringwood 1949-1956



South End Rd Yallourn Depot 1951 – 1985

East Ringwood Depot 1954-





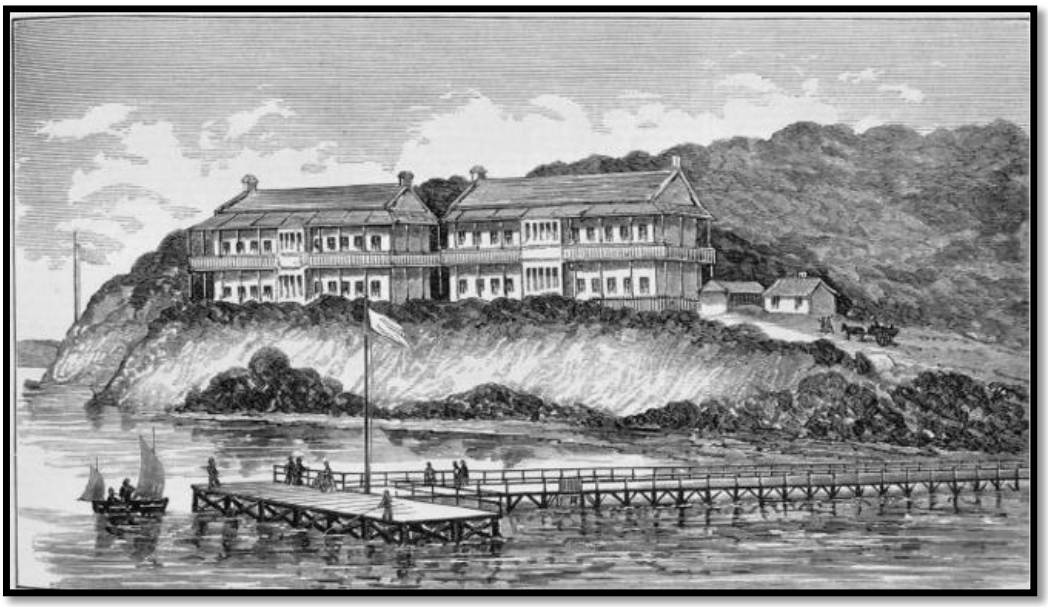
Monash Road, Newborough 1984-

Having established the first permanent Australian military engineer depot in Lygon Street Carlton in 1864, and later depots throughout the suburbs, Victoria was the home of some significant military establishments.

The first home of the Ministry of Defence was established at Victoria Barracks in St Kilda Road in Melbourne in 1901. Victoria hosted the Army Apprentices School at Balcombe on the Mornington Peninsula, the Officer Cadet School at Portsea and the Army Staff College at Fort Queenscliff. Many sappers are graduates of these schools. The Australian Disaster College was established at Mount Macedon and various scientific and testing grounds were also located in Victoria.



Victoria Barracks, St Kilda Road Melbourne



Officer Cadet School – Portsea, 1952-1985 (Originally a Quarantine Station)



Army Command and Staff College, Fort Queenscliff (1946-2001)

Note: Edward VIII Badge on front of building



Army Apprentices School, Balcombe Barracks (1948-1982)

Originally a militia camp, after the Pacific Battle of Guadalcanal the 1st Division US Marine Corps occupied Balcombe Camp before returning to the Pacific to continue the war with Japan.

Ultimately, the apprentices school moved to Bonegilla near Albury-Wodonga in 1983. The Officer Cadet School was absorbed into the Royal Military College at Duntroon in 1985 and the Army Staff College moved to Weston Creek, ACT in 2001.

CHAPTER THREE

The birth of the RAE and SR

1902 Corps of Australian Engineers Formed

The Corps of Australian Engineers was founded in 1902 just after the Federation of all Australian States, R.R. McNicoll (Vol. 1, p.170) provides a wonderful insight:

"The several corps which now amalgamated had experienced their ups and downs, like other elements of the colonial forces; had suffered from political interference or indifference, from patronage or neglect; had struggled especially against a lack of understanding of the role of the sapper and of the growing importance of engineering in war. The colonial engineers had experienced hardship but, so far, rarely danger: except as individuals they had not been in action against an enemy or had to work under fire. Their testing time was to come."

These Colonial Forces were amalgamated on 1 July 1902 as the Australian Corps of Engineers consisting of field, fortress, telegraph, electric and submarine mining companies. On 19th March 1907 the small regular engineer component was granted the prefix *"Royal"* however, the militia remained the *"Australian Engineers"* until 31st January 1936. (Marett p.16, No 40).

A succession of formal insignia (the Corps Badge) tells the story.



Corps of Engineers Australia - 1902



Australian Engineers - 1907

Royal Australian Engineers - 1907

Royal Assent given to a small Regular Component of The Australian Engineers





Australian Engineers – 1931

George V



Australian Engineers -1936

George VI, before Royal Assent



Royal Australian Engineers -1953

Elizabeth II



Royal Australian Engineers - 2022

Charles III

Post WWII - Early days of a new direction

After the calamity of World War Two (WW2), the Australian Army pondered on the shape of its force structure to respond to the needs of the second half of the 20th century.

For sappers, the cessation of hostilities was not the end – there was still much work to be done. As the Corps Historian explains:

"In 1941 the proportion of RAE in the Australian Army was five per cent. By early 1945 nine per cent of the Army were sappers who numbered 28,000 and were making essential contributions to not only its teeth but also its tail" (McNicoll, Vol 3. p328).

The Australian contingent of the British Commonwealth Occupation Force (BCOF) arrived in Japan in February 1946 for a six-year occupation. Many sappers were involved. The charter of the United Nations had been formulated at the end of WW2 and Australia contributed four military observers to the first United Nations Peace Operation, UN Good Offices Commission (UNGOC) into the field in Batavia, then the Dutch East Indies (Indonesia) on 14 September 1947.

Many more international military and humanitarian deployments would occur at an increasing tempo for many decades to come.



Engineers in WW2 (AWM)

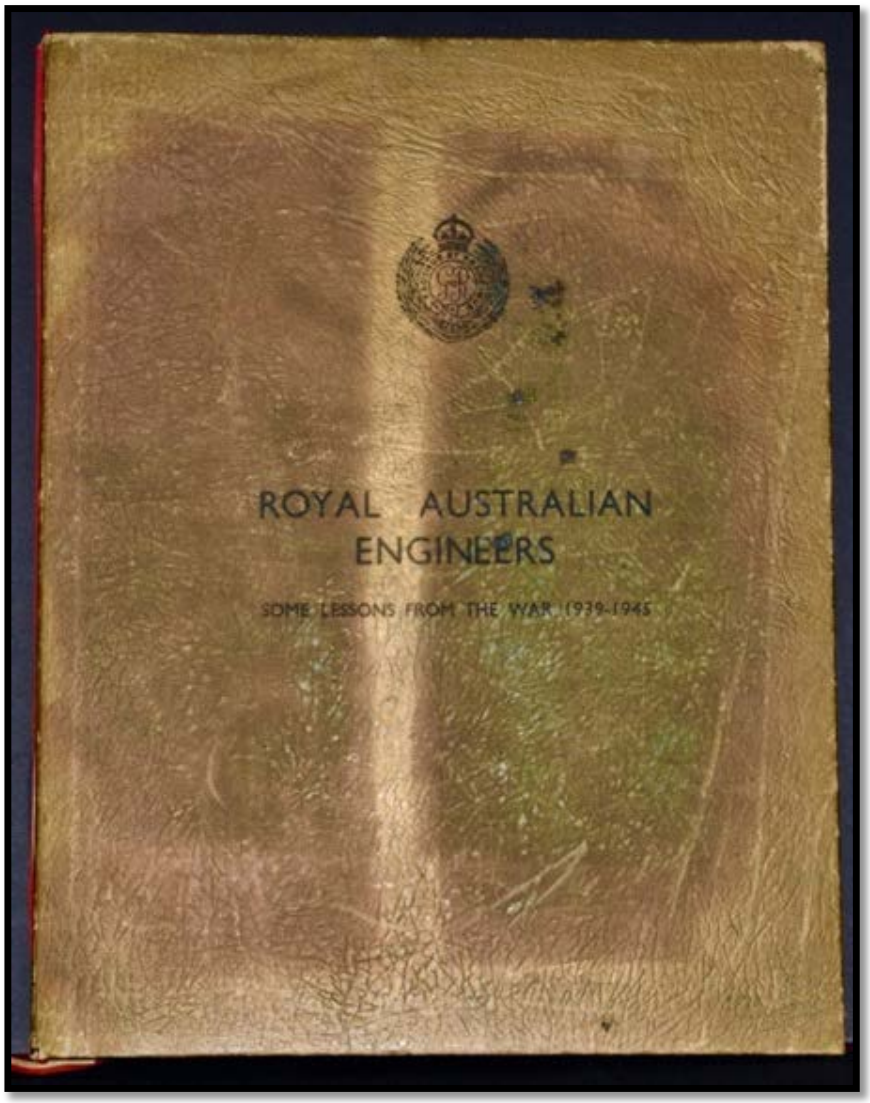
Critical Lessons Learnt

Several critical engineer lessons were learnt by the Engineer-in-Chief, Major General Sir Clive Steele, at the end of WW2 as a guide to the future (Greville, Chap 22). One of the vital lessons that "paved the way" for military engineers in Victoria, was that,

"Citizen Military Force (CMF) or Supplementary Reserve (SR) is a vital part of the Army, particularly for the RAE".

In essence, the lesson from WW2 highlighted that the Army needs to be able to call upon individuals or sub-units possessing certain skills in short supply amongst regular forces. For the latter half of the 20th century, and well into the new millennium, this proved especially true for the Medical, Legal and Engineering professionals and their associated technicians.

This vital lesson reinforced that during collective training exercises, such individuals and sub-units should be committed in order that their use may be practised. Increasingly, the use of Reserve military forces has been integrated into not only training, but also in operations conducted by Australia (Military, Civil and Humanitarian).



ROYAL AUSTRALIAN ENGINEERS Some lessons from the War (1939-1945) Part of the RAEAV Collection

This copy was given to Brigadier J Mann by Major General Steele.
Brigadier Mann was good friends with Lt Col James Wearing Smith and on Brigadier Mann's death this document was passed to Lt Col Smith.
Following Lt Col Smith's death this document then passed to his daughter Megan Martin.
Megan Martin then presented it to the Old Sappers Association for safekeeping and display on 6th June 2010 and is now on display in the History room of the Royal Australian Engineers Association of Victoria

Scoping a Problem: The Beginnings

With these lessons learnt from two previous World Wars (of the difficulty in rapidly raising qualified and properly trained engineer units) a distinct challenge was created as to how this dilemma could be overcome.

In March 1947, at the instigation of Major General Sir Clive Steele KBE, DSO, MC, VD (Engineer in Chief of the Australian Army in 1942-45) and the Institution of Engineers Australia, an approach was made to the Minister for Army with a proposal to form a Permanent Corps of Engineers. During 1948 other proposals were investigated, including the Affiliation (Sponsorship) Programme of the United States of America Corps of Engineers and the British Supplementary Reserve (SR) system.



Major General Sir Clive Steele KBE, DSO, MC, VD.

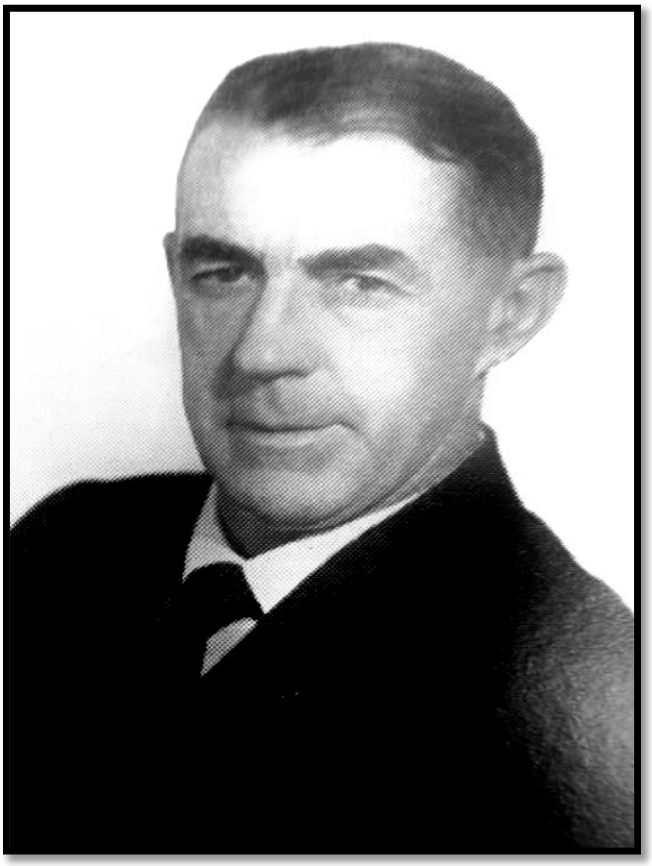
Sponsoring Authorities

So, the Supplementary Reserve Scheme was established in 1950.

In essence, units could be sponsored by organisations through counties, shires, municipalities, government, or semi government instrumentalities.

The Minister subsequently authorised the raising of two engineer regiments using the Supplementary Reserve system, one in New South Wales (21st Construction Regiment SR), and one in Victoria (22nd Construction Regiment SR) on an active reserve basis.

The Victorian Regiment was first to raise on 4 August 1950. Lieutenant Colonel I.J. (Paddy) O'Donnell ISO, OBE, ED, who had been the Commander Royal Engineers (CRE) 8th Division in Malaya during WW2, a prisoner of war (POW), and a senior engineer in the Country Roads Board (CRB) of Victoria, was appointed Commanding Officer. He was greatly assisted by Lieutenant Colonel A.T.J (Ding) Bell, Chief Engineer Southern Command (later Brigadier Bell OBE, Engineer in Chief of the Australian Army), along with senior staff of the various sponsoring authorities.



LtCol Paddy O'Donnell ISO, OBE, ED on his appointment as Chairman of the CRB - 1962

As one of Australia's oldest "Supplementary Reserve" sub-unit's, 105th Construction Squadron (105 CS) was raised on 4th August 1950 born out of this critical need. The Australian Army needed a broad range of professional, trade and technical skills readily available for potential contingencies.

The unit was a sub-unit of 22nd Construction Regiment (Supplementary Reserve) (22 Const Regt SR)**.** *Note: the SR suffix was removed when the unit became a normal conditions reserve unit.* 22 Const Regt then amalgamated with the 4th Combat Engineer Regiment (4CER) on 1 January 2014 to form the **22nd Engineer Regiment (22 ER) - *Victoria's Own Sappers.***

Sponsored by the State Rivers & Water Supply Commission (SR&WSC)**,** 105 CS enjoyed being part of a large grouping of specialist engineering capabilities available to the Australian Army from State Government statutory bodies. As well as the SR&WSC, these included: The Country Roads Board (CRB**)**, Melbourne and Metropolitan Board of Works (MMBW) and later, the State Electricity Commission (SEC).

The SEC sponsored 99 Const Sqn in 1952 and in 1953 expanded its commitment to establish 16th Construction Regiment (Supplementary Reserve) (16 CR), comprising 99 Const Sqn, 39 Electrical & Mechanical Sqn and 80 Quarrying Squadron. 203rd Works Section (203 Wks Sect) was later raised as part of that Regiment in 1957.

Many valuable engineering skills and experience were available from these large State Government Authorities. Other later contributing authorities included: the Melbourne Harbour Trust, Victorian Railways, and the Forestry Commission.



State Rivers and Water Supply Commission Victoria



Melbourne and Metropolitan Board of Works



Forests Commission of Victoria



State Electricity Commission of Victoria



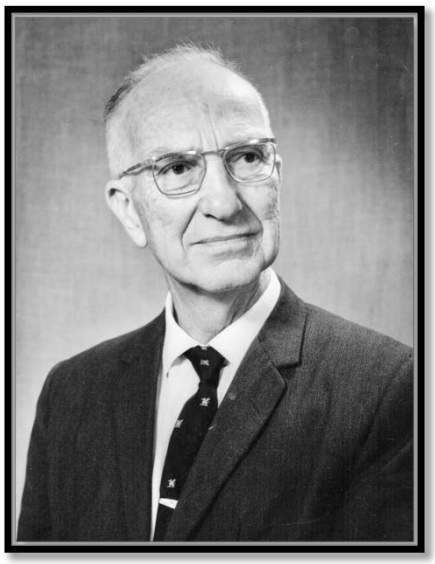
Country Roads Board Of Victoria



Victorian Railways

Mr Don Darwin ISO, MM, MCE was a sapper in the 10th Field Company 1st AIF in France during WW1 and earnt a well-deserved Military Medal whilst undertaking critical reconnaissance work in most hazardous conditions. This action is well recorded in (Sapper Summit No. 101 p. 43-46).

Don became the Chairman of the Country Roads Board in Victoria, and along with Major General Sir Clive Steele, the Engineer in Chief of the Australian Military Forces, the Director of General Works and Housing, Mr L.F. Loder (later Sir Louis, C.B.E.), and Sir L.R. (Ronald) East, the Chairman of the State Rivers, and Water Supply Commission, took carriage of this important proposal, and enacted it.



Mr Donald Victor Darwin ISO, MM, MCE, MICE, MIE(Aust), Chairman CRB



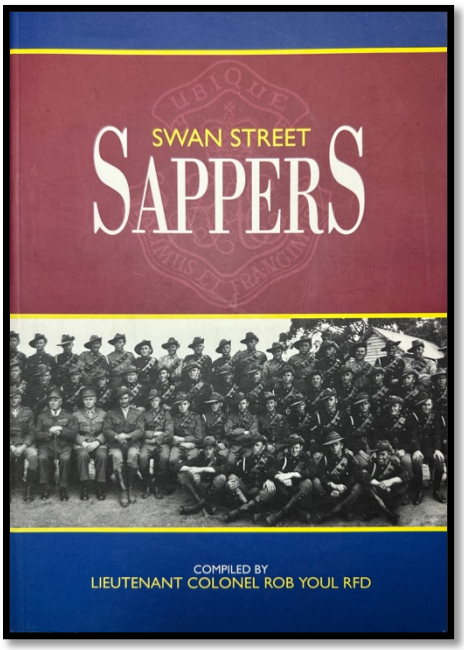
Sir Ronald East Kt, CBE, Hon FIEAust - SR&WSC Chairman

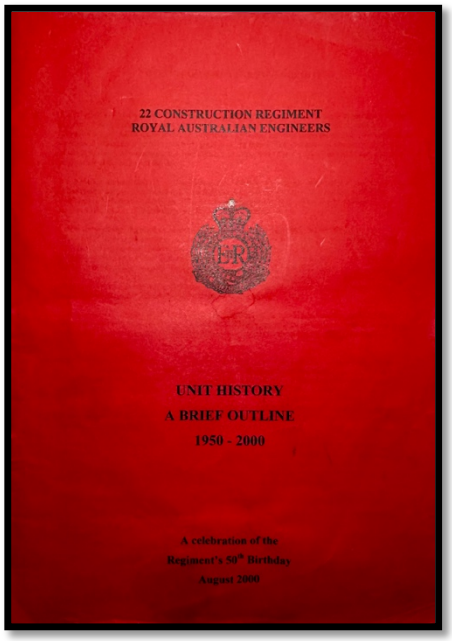


Sir Louis Francis Loder

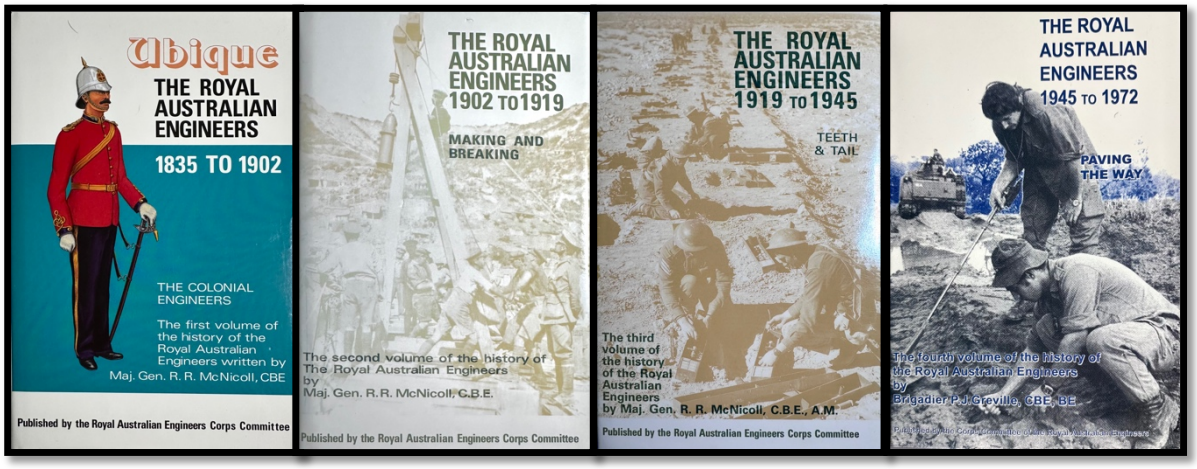
The level of technical expertise within these government authorities was first class. Many professional engineers, technicians and tradespeople also had considerable World War Two experience. At the time, these government authorities were huge organisations that undertook most large construction and engineering works throughout the country. Later in the 20th century, much of these functions were outsourced to civilian contractors.

Much of the foundation history of 105th Construction Squadron has been showcased in *"The Swan Street Sappers"* by Lieutenant Colonel R.M. (Rob) Youl OAM, RFD (Retd), and *"22 Construction Regiment – Unit History, A Brief Outline 1950 -2000"* by Major B.A. (Bruce) Campbell RFD, ED, (Retd).





Other sources include Major General R.R. (Ronald) McNicoll CBE, AM, MID, *Volumes 1-3, History of the Royal Australian Engineers*, along with *Volume 4 of the Royal Australian Engineers* by Brigadier P.J. (Phil) Greville CBE



The diversity of skills within the current units has a direct linkage to a broad array of past sapper units: 91st Forestry Squadron, 80th Quarrying Squadron, 39th Electrical & Mechanical Squadron, 1st Port Construction & Repair Group (NSW), 29th Plant Squadron (LT), various Railway Squadrons, Docks Operating Squadrons, Movement Control Groups, Postal Units, Maritime and Small Ships.

Along with 105th Construction Squadron, this Diamond history also acknowledges 203rd Works Section RAE and the Headquarters of 22 Engineer Regiment. A team of highly talented and qualified professional engineers and technicians. The headquarters, squadron and works section have underpinned many RAE projects.




RESERVE FORCES DAY
COMMEMORATIVE MARCH
AND CEREMONY

MELBOURNE - WEDNESDAY
1st JULY 1998

THE ASSEMBLY
THE MARCH
THE COMMEMORATIVE CEREMONY

By Authority of
The Victorian Organising Committee
MELBOURNE







The 1950's – First Annual Camp



22 Construction Regiment – 105 Construction Squadron RAE(SR)
Puckapunyal October 1950 Camp (Their first Bailey Bridge)

The first two-week Annual Camp for the Regiment was held at Puckapunyal commencing on 30 September 1950. The original organisation, sponsoring authorities and commanders were:

HQ 22 Const Regt (SR),	**(CRB)**	**Lt Col I.J. O'Donnell ISO, OBE, ED**
104 Const Sqn	**(CRB)**	**Maj R.F. Eastick MBE**
105 Const Sqn	**(SRWSC)**	**Maj V.G. Swanson MID**
106 Const Sqn	**(MMBW)**	**Lt H. Miller**
107 Plant Sqn (Heavy)	**(CRB & SRWSC)**	**Capt W.H. Dolamor**

Total numbers who attended the 1950 camp was 221. Training was conducted by Regular Army instructors and directed principally towards basic soldiering with drill and the care and use of weapons. This concept changed considerably as the units progressed through the 1950s and, by 1960, members of the Regiment provided all camp training except specialist subjects such as demolitions and arranged most of the training of its own officers and NCOs.

The first two recruits to be enlisted into 105 Squadron were 3137500 Sapper Rod Carr (who later became the SSM of 105 in 1958, appointed Lieutenant in 1965, and retired in 1966) along

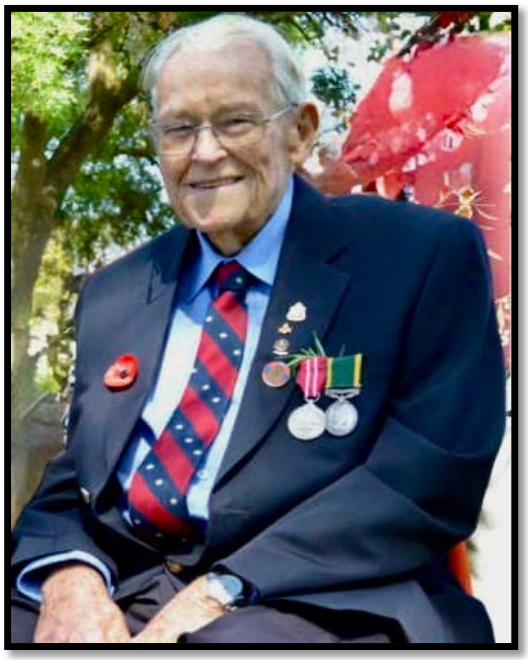
with 3137501 Sapper Norm Dodgson (later SSM of 105 in 1962, RSM of 22 Regt in 1978). WO1 Dodgson retired in 1988 after 38 years of service. The longest serving member of the Regiment to date.



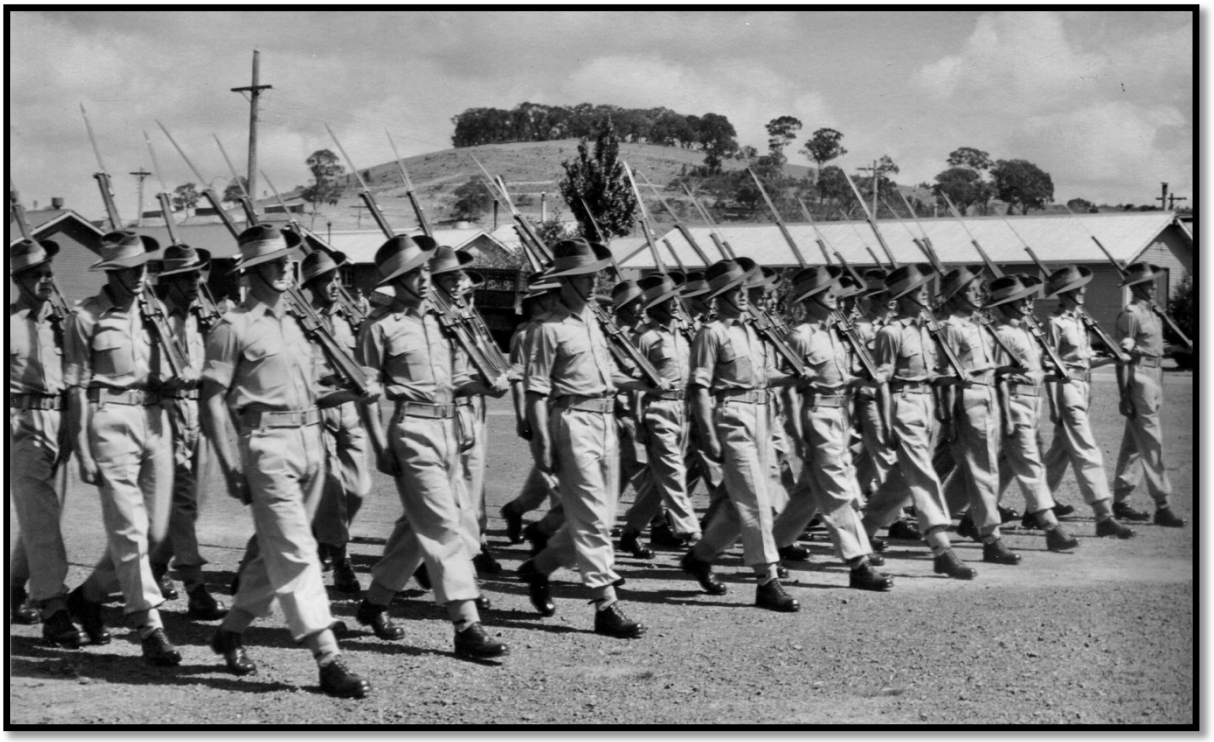


Chairman of the State Rivers and Water Supply Mr McKay meets SGT Norm Dodgson September 1955 and addresses the troops

137566 Sapper John (Jack) Muir was one of the early recruits enlisting in 1955. He worked for the SR&WSC at Tatura and his practical and technical skills would prove an invaluable resource for the Army. This was aptly demonstrated when 84 Supplementary Reserve personnel deployed to Wewak in PNG to relieve 21 Construction Squadron in 1963. Jack Muir's experience and knowledge of working, particularly with forestry crews, was invaluable. He would later be the SSM of 105 Const Sqn in 1969 – 72 and awarded an OAM for his services to the community of Tatura in the Queen's Birthday Honours list in 2020. He died just weeks after receiving his OAM at age 98.



WO2 "Jack" Muir OAM, one of the early recruits and later SSM 105 Const Sqn



Early Annual Camps Puckapunyal

Bruce Campbell also enlisted in 105 Construction Squadron (SR) in 1955 and commanded it from 1965-76. He was a surveyor, first with the State Rivers and Water Supply Commission, and later with the State Electricity Commission. He spent most of his 46 years of professional surveying on works related to construction projects. He was active in the Institution of Surveyors Australia and served a term as the Victorian Division president.

As the 1950s progressed, it was also realised that attendance at Annual Camps only did not make for an effective Regiment. Additional training in the form of weekend camps for officers and training courses for NCOs/potential officers were introduced.

Annual camps in the 1950s centred on; Puckapunyal (A block), Seymour (site 17), Scrub Hill (site 5), Sunday Creek and Mt Hickey. A bridging store at Sunday Creek was constructed along with road upgrades at Mt Hickey. Infantry minor tactics were not forgotten with *Operation Canungra* at Scrub Hill in 1956.

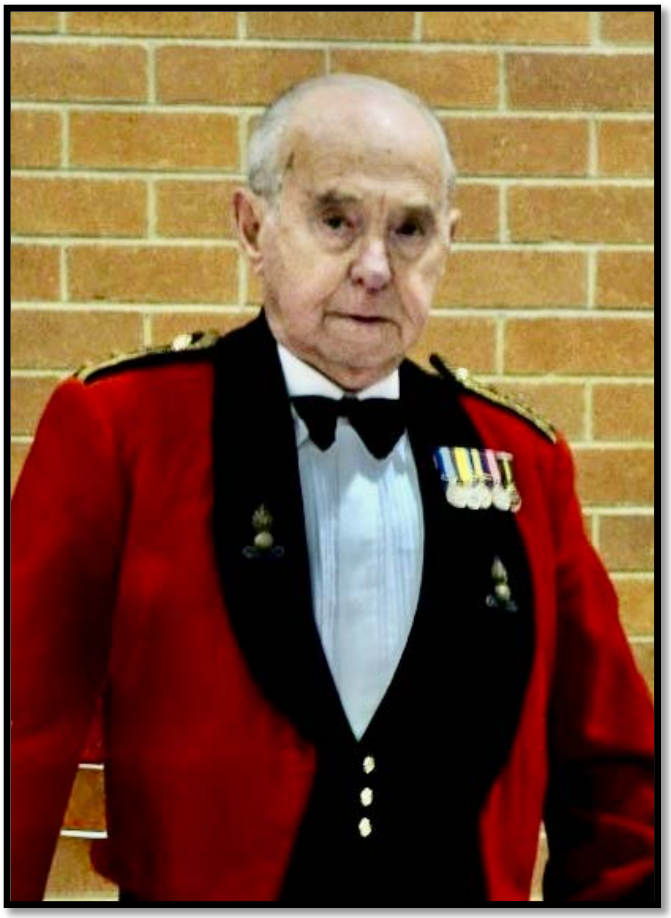


While 91 Forestry Sqn was never part of 22 Const Regt, the Sqn joined with the Regt on many training activities. The Sqn was renowned for the keenness of its personnel and for the long service of its early OCs, Majors Don Anderson, Ben Bennallack and Les Malseed. Later OCs drawn from 22 Regt included Maj Shane O'Keefe from 105 Sqn.

Amongst enlistees in the 1950s to become prominent NCOs were Bryan James, Derek Lee, Albie Smith and Jim “Chuckles” Chandler in 104 Sqn, Ron Carr, Norm Dodgson (38 years), Bob Eaton, Jack Muir, Allan Moore, Barry Charles and Peter Bloor (36 years) in 105 Sqn, and Keith Bennett, Tony Bourke and Ray Wynd in 106 Sqn.

Other officers who joined or were commissioned in the 1950s, some with WW2 experience, included Maj Jack Dunne, Maj Tom Thomason, Capt Ron Dickson and Capt Ron Sloan. Majors Dunne and Thomason progressed to command 105 and 106 Sqns respectively during the 1950s and 60s; Capt Dickson was a most successful Admin Comd of 105 Sqn in 1958/59; Capt Sloan served as 2IC of 105 Sqn for a long period in the 1950s/60s, and both he and Capt Dickson were prominent in recruiting campaigns that successfully rejuvenated 105 Sqn in the period 1958-1965.

Colonel Bruce Addis – affectionally known as the “Angry Ant”, a senior CRB bridge engineer and a forthright and inspiring leader – became OC 104 Const Sqn in 1965, CO 22 Regt in 1968, COMD 6 Const Group 1973-76, and ultimately Colonel Commandant of the RAE in Victoria. Colonel Geoff Hunt, a senior CRB road engineer, had a similar progression: OC 107 Sqn in 1966, CO 22 Regt in 1975 and Group COMD 1980-83. Bruce Campbell, a SRWSC surveyor, was OC 105 Sqn from 1965 to 1976. Les Malseed joined 104 Sqn as a recruit in 1952 and was finally promoted Major in 1968 as OC 91st Forestry Sqn.



Colonel Bruce Addis RFD, ED.

The 1960's - First Forays Overseas

In January 1963, 84 members of 22 Const Regt became the first SR troops to serve overseas. All volunteers, the Victorian sappers replaced regular Sappers of the 21st Construction Squadron operating at Wewak in Papua New Guinea. The regular squadron had been tasked with road building between Wewak and Maprik on the Sepik River to facilitate local trade. The regular sappers had returned to Australia on well earnt leave.

A small team of reserve sappers replaced some of the roadbuilders, but the majority made up the two Troops assigned to carry out bridge construction works.

OC 21 Const Sqn was then Major Peter Gration, later General Gration AC, OBE, Chief of the Defence Force (CDF) along with his Works Officer/ Quartermaster, Captain John Wertheimer, later Colonel John Wertheimer AM, RFD, COMD 6 Engr Group.



General Peter Gration AC, OBE.

Bruce Campbell remembers the supplementary reserve's first foray overseas:

"The contingent from the Regiment, led by Capt David Hewson of 104 Const Sqn, formed into two troops within 21 Const Sqn. Other officers were Troop Commanders, Capt's Geoff Hunt, and Bruce Campbell, along with the Works Officer, Lt Geoff Vines. The Reserve sappers continued work on the road and constructed two timber bridges in two weeks – one was a single span 13M long bridge, and the other, a triple span at 25M in length."

Bruce Campbell adds that:

"The 84 members of the contingent involved in the project assembled at the Swan Street Depot after work on a Friday night, flew out from Laverton by RAAF Hercules Saturday morning, stayed overnight at Murray Barracks in Port Moresby, and arrived at Wewak on Sunday morning. Reconnaissance was undertaken on Sunday afternoon, and work on the bridges commenced Monday morning.

Some troops were detailed immediately to work also on the Maprik Road project and, as work on the bridges progressed ahead of schedule, others were detailed to carry out culvert construction on the road. All works were completed ahead of schedule and the larger bridge was formally opened by Sir Paul Hasluck, then the Australian Minister for Territories."

John Wertheimer remembers this time in PNG well:



Col John Wertheimer AM, RFD

"Victorian Reserve Sappers brought a unique array of skills and expertise not readily found in the regular army. This, combined with their enthusiasm, produced outstanding results, and proved that Sir Clive Steele's strong post WW2 recommendation of ensuring that highly skilled reservists should be available to the Army, particularly within the RAE, was correct. HQ 22 Engineer Regiment, 105 Const Sqn and 203 Works Sect have continued this legacy into the 21st century."



Bridge over Boram Creek, one of many built in PNG. Decorated for the opening by The Hon. Paul Hasluck (Swan Street Sappers)

Officer and NCO training improved throughout the 1960s with more members of the Regiment attending promotion courses and specialist technical courses at the School of Military Engineering (SME). Then located at Casula in the southwest of Sydney, SME provided courses such as bridging, watermanship, and demolitions. Officers generally attended 4 Tactical Exercises Without Troops (TEWTS) annually.



1965 saw the expansion of 105 Construction Squadron. In early 1965, following the retirement of Major Jack Dunne RE, the new OC, Major Bruce Campbell, was questioned by the SR&WSC Commissioner, Ken Green (later Major General K.D. Green CB, OBE, ED, MID and Commander Third Division) what plans he had for the future of the Squadron?

Major General K.D. Green CB, OBE, ED, MID

Bruce was able to detail plans for an extensive recruitment campaign as he had many good NCOs who were not fully employed at the time. The plan was enthusiastically supported by the sponsoring authority. A week-long tour to about a dozen Victorian SR&WSC country district offices was undertaken by Bruce and an enthusiastic Lieutenant reaping 66 new recruits.

After attending an enlistment weekend at the Swan Street Depot, the new recruits completed their induction at the 1965 annual camp a few months later. The Squadron, which had been the Regiment's smallest (numbering about 25 in 1956) became the largest numbering 135 at the 1966 annual camp. This trend continued for the next decade with 105 Squadron making up more than half of the Regiment's total strength.

In 1966/67 a special "crash course" was conducted to provide the Regt with 12 new Lieutenants. Candidates attended two full-time courses and approximately 12 weekend courses to qualify as Corporals and then as Lieutenants. Training, both collectively and individually, along with positive and vigorous recruiting were the key ingredients to this ongoing strength of the Supplementary Reserve, particularly within 105 Squadron.

From 1967, the Army called for volunteer CMF officers to serve short periods as observers in South Vietnam, with the purpose of providing technical assistance. It also sought to upgrade the awareness and training of reserve units in Australia. At various times from September 1967 onwards, Lt Col Bruce Addis, Maj Bruce Campbell, Maj Warren Hardy, Maj Geoff Hunt, Maj Les Malseed and LtCol Graeme Marshallsea all represented the Regiment in Vietnam.

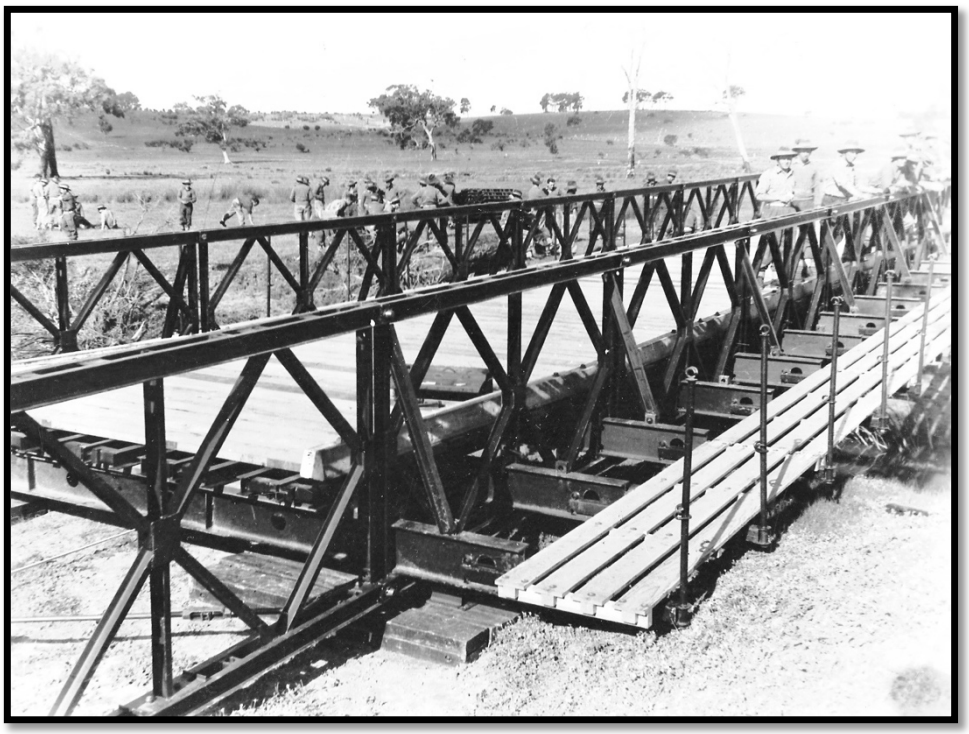
1968 saw the Regiment utilize the Benalla Airfield for annual camp and featured the first infantry minor tactics (IMT) training conducted for several years. Conducted in steep, heavily wooded terrain southwest of Benalla by inexperienced and young instructors from outside of the Regiment, coupled with poor communications and bad weather, the training proved unsuccessful. It provided a sound lesson for future training. By 1969 the new CO, Lt Col Bruce Addis, injected major organisational changes for the Regiment's first camp at Scrub Hill. Each of the Squadrons were allocated a specific training focus; 104 Sqn-Demolitions, 105 Sqn-Infantry Minor Tactics, 106 Sqn-Watermanship and 107 Sqn-Recruit Training.

Centralised recruit training proved efficient, and the largest Squadron (105) took on the responsibility for conducting IMT training which was a large focus for the Regiments annual camp. Several NCOs from 105 Sqn attended courses at Canungra early in the year to ensure the training was successful.

The 1960s saw the last of the officers with WW2 experience moving on to retirement or higher appointments. These included Lt Col RC Handley, Maj JR Dunne, Maj K Opie and Maj TKD Thomason, each having commanded a squadron and Lt Col Handley and Maj Opie having commanded the Regiment. Their successors were a new breed of officers trained in peacetime and who provided talented and strong leadership from the mid-1960s onwards.

Numerous projects were conducted as weekend bivouacs. This system had commenced in the early 1960s and typically included the installation and removal of temporary bailey

bridges by 104 Sqn and 105 Sqn on CRB highways, to assist in replacement of irrigation channel bridges and water supply works by 106 Sqn, for the MMBW.



Bailey Bridge

The 1970's – A Decade of Consolidation

Bruce Campbell calls this period the "*decade of consolidation*". With the Vietnam conflict still underway but winding down, training included bridging, field defences, mine-warfare, demolitions, watermanship, and infantry minor tactics. Particularly 105 Squadron, was keen on shooting and participated in shooting activities regularly. This decade saw the Regiment have forays to Benalla Airfield Camp and to the School of Military Engineering, then located at Casula.

The Regiment celebrated its 21st Birthday in 1971 at Scrub Hill, Puckapunyal. The training program was somewhat different to any other year. With the Regiment celebrating its 21st birthday, much emphasis was placed on drill and preparation for an impressive Regimental parade held on the Sunday mid-way through the camp. Scrub Hill featured again in 1972 and 1977 for the annual camps.

In 1973, Major Bruce Campbell was supervising routine mine-warfare training on the front lawn of the Swan Street Depot with sappers from 105 Construction Squadron. The abandoned city precinct was devoid of people because a huge sporting event was about to take place at the MCG involving a visit from Queen Elizabeth II

A "*Regal looking car*" motored up the street towards the sappers. Bruce was quick enough to assemble the motley crew of scruffy sappers into formation and provide an impromptu "Guard of Honour"!

Expecting an event free journey to their next Royal appointment, the Queen accompanied by her consort, were both caught by surprise. The unsuspecting security detachment went into "full alert" mode. Travelling on the driver's side of the Royal Limousine, Prince Philip simply returned the salute in great Naval style, on behalf of the Queen, and sailed past unharmed!

The sappers returned to their training.

Later, it was revealed that despite bordering on a royal breach of security, Prince Philip said in defence of the sappers, ***"Oh my god, that is just what sappers do!"***

The 1973 annual camp was held at Benalla Airfield and included bridging and watermanship training on Lake Mokoan to the northeast of Benalla near Winton. This great training was saddened by the tragic and sudden death of LT Jack Lowery ED.

Jack was a popular member, and wonderful gentleman, of 105 Construction Squadron who was the District Engineer for the Water Supply Commission in Horsham. Jack had suffered a mild heart attack at the end of the 1968 Benalla Camp and had been on restricted duties ever since. Jack returned to duty for the first time in 1973 and died of a heart attack sitting at his desk in 105 Squadron HQ on day 10 of camp. He had only minutes before been on parade. His OC, Bruce Campbell, and SSM, Norm Dodgson, administered first aid but Jack was later pronounced deceased by a local doctor.

As a most popular member of the Squadron, several members attended his funeral at Horsham on the last day of camp. Having only recently received his Efficiency Decoration, it was presented to Jack's 10-year-old son by the OC. Jack Lowery ED is the only member of the 105 SQN who has died on duty.

LCPL Duncan Orr was accidently killed in a vehicle accident whilst on exchange with 3 Field Squadron RNZE on 16 February 2013.

Other close calls have been recorded. A watermanship accident where two sappers were knocked unconscious but were quickly rescued by the safety craft. Another, with unexploded ordnance detonating beneath a fire on Puckapunyal Range.

An annual camp in 1974 at SME took advantage of the equipment available to conduct bridging and watermanship training. 105 Squadron whilst in Sydney, was given the great opportunity to provide a guard of honour for the opening ceremony of the building in Paddington that had been first erected as the School of Military Engineering Headquarters in 1880. Captain Brian Chirgwin commanded the 33-member guard who performed impeccably. One commentator stated, *"the perfect display by the sappers would have put the Grenadier Guards to shame!"*



Guard of Honour at Paddington, Inspected by LT General Mervyn Brogan, Chief of General Staff, Captain Brian Chirgwin, Later Major on the left followed by Col Jim McBride, later Chief Engineer in Victoria 1978-81

Competent use of small arms was extremely well fostered within 105 Squadron who were blessed with some excellent rifle shooters lead by SGT Roger Mitchell, who in civilian life, was a field surveyor and Captain of the Rochester Rifle Club.

In 1973, at Rogers suggestion, 105 CS formed a 5-person rifle team to compete in the 3rd Division annual small arms competition at Puckapunyal. In competition with teams from about 30 other units, the 105 Squadron team won, but were disqualified on the grounds that they were not fully equipped! Some were found to have half empty water bottles! Despite this disappointment a strong focus continued within 105 Squadron with rifle, sub-machine and pistol shooting teams ultimately winning 3 of the 4 trophies on offer in 1976. Sappers had shown the way for the whole Division! Several shooters won individual trophies, including SGT Robert Mitchell and CPL Eddie Niproski of 105 Sqn.

SGT Mitchell inspired his Army team-mates over many years. In 1977, he was individual champion of 3 Div, shot in the Queens Medal finals and was the highest scorer (and only reservist) in the Army team at the Canberra tri-service championships. 105 Sqn helped organise and took part in the 1976 Queens Medal shoots.

Lance Corporal Michael (Pottsy) Potts (10 Field Squadron & RAE Association Victoria), an Industrial Chemist and Teacher, remembers teaching alongside Sergeant Eddie Niproski at Lilydale Technical School in the 1970's and 80's. Eddie was one of the champion shots of 105 Squadron, and a popular teacher, known by his friends as "Fast Eddie". Eddie would later be involved in the construction of the Lysaght shed at the Newborough Engineer Training Depot.

The shooting competition was known as the "Victorian Challenge Shield". Shooting has always been, somewhat uncharacteristically, one of the traits of Victorian sappers. Even in the early 2000's, the then CO 22 Const Regt, Bill Van Ree, remembers asking *"where are all the sappers?"* when he noticed a discrepancy in the numbers present on parade. *"Oh, they are at the range practising for AASAM (the Australian Army Skill at Arms Meet)"*. Bill remembers that many SR sappers were involved in this annual competition for many years.



MAJ Bruce Campbell (right) and LT Bob Klos with the Victorian Challenge Sheild, won by 105 Construction Squadron's riflemen; top shot CPL Eddie Niproski kneels in front. (Swan Street Sappers)

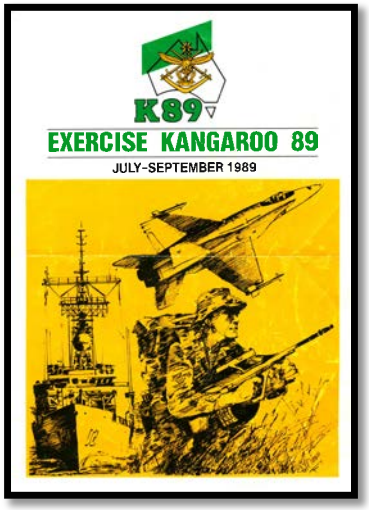
Training in 1975 included an infantry minor tactics (IMT) exercise in the forests of Puckapunyal range. 200 sappers enjoyed aviation support with both Iroquois helicopters and RAAF C130 Hercules aircraft. 1976 saw a return to Benalla with bridging and watermanship on Lake Mokoan with a defensive exercise on an island in the lake.

Captain Brian Chirgwin assumed command of 105 Squadron in 1977 and IMT and project works were conducted from Scrub Hill. In 1978 the Squadron deployed to SME in Sydney again to conduct bridging, mine-warfare and nuclear, biological, and chemical (NBC) training utilising the wonderful expertise and equipment at the "school". In 1979, 22 Regiment deployed to Puckapunyal in four phases, with each Squadron undertaking projects including roadworks at Monegeeta.

Bruce Campbell reflects on this decade and is proud of not only the construction skills of 105 Squadron, but also their military prowess. He is also proud of the informal nickname of *"105 Independent Squadron!"*

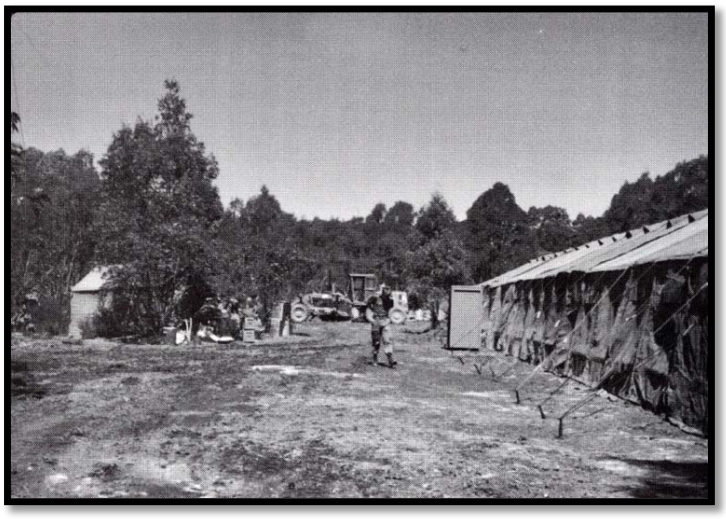
The 1980's – Integration "One Army"

General Peter Gration (a sapper) was Chief of the Defence Force (1987-93) and encouraged a "one army" policy and put much emphasis on integration between the Australian Regular Army (ARA) and the Army Reserve (ARES). This resulted in members of 105 Squadron serving frequently with other units both ARA and ARES. As a result, many members were involved in various projects including RAAF Base Tindal in 1988, Darwin in 1989, the Kimberley in 1990 and the series of Kangaroo Exercises throughout the country.



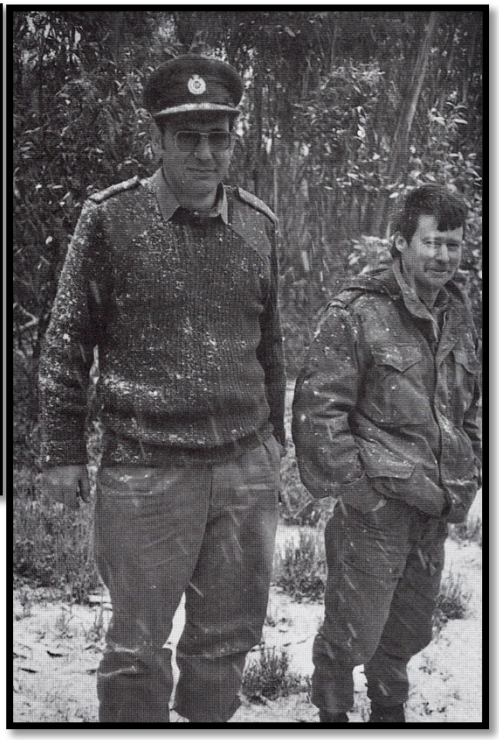
In 1980 bridging and IMT training was based out of Jerusalem Creek at Lake Eildon. A courses camp was conducted at Puckapunyal in 1981 in preparation for a memorable Regimental annual camp in 1982 involving several road construction projects in the Macalister and Glenmaggie areas. 105 Squadron was tasked with the most difficult project, the construction of a 4km access track through the snow-gum country to the Mount Useful look-out.

The area, including their campsite, was snow covered at the time, and working conditions were most difficult.



105 Sqn's camp at Mt Useful Late 1982 (Swan Street Sappers)





MAJ Bob Klos and CPT Shane O'Keefe In the snow at Mt Useful (Swan Street Sappers)

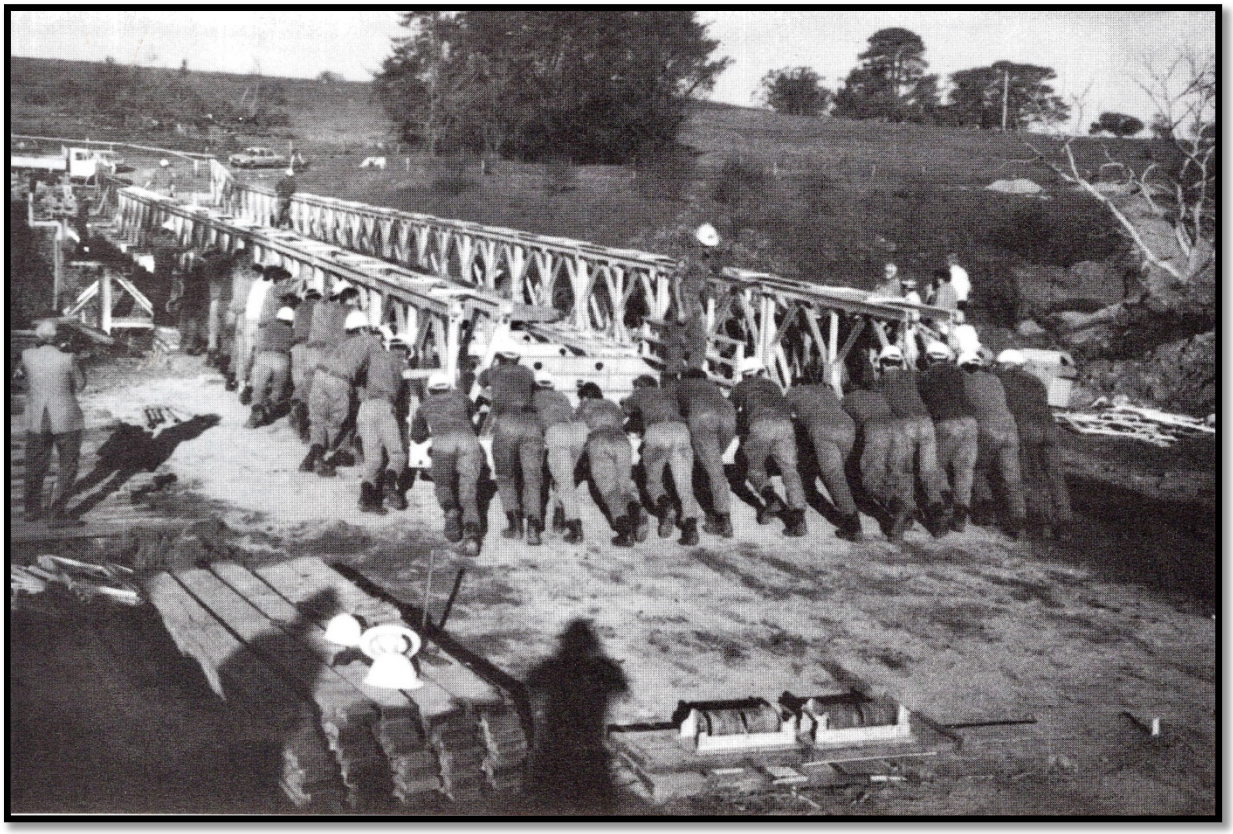
Again 105 Squadron in 1983 deployed by RAAF C130 Hercules aircraft to SME where training included a plant operator course. In 1984 the camp was at Puckapunyal and included IMT, fieldcraft, patrolling and night navigation. Small projects were also undertaken including work at the sawmill site and re-decking of bridges on the range. In 1985 the annual camp commenced at Puckapunyal, then moved to Eldorado near Beechworth to practise dispersed operations, while some troops moved to Eildon to assist the 4th Brigade.

Coming under command of 1st Construction Regiment (ARA) in 1986, 105 Construction Squadron took part in Exercise Triple Shift. They also built a grenade range and roadworks at Puckapunyal. Again, centred on Puckapunyal the 1987 exercise was a "round robin" training system including watermanship at Nagambie, along with demolitions, water supply and bridging. Some drivers took part in a convoy exercise.

Returning to SME in the Bicentennial year (1988), many sappers took part in the various celebrations and were also part of the Army Tattoo. Others assisted in 3rd Division exercises at both Puckapunyal and Eildon. The Army-wide Exercise Kangaroo 89 dominated the unit's resources for this year along with some assistance at RAAF Base Tindal in the Northern Territory.

Following the Ash Wednesday bushfires in 1983 a group of sappers, mainly from 105 Squadron, and under command of LT Russell Tregear, built a double/single bailey bridge at Framlingham in western Victoria as a temporary replacement for a road bridge destroyed in the dreadful fires.

This would establish a precedent for sappers in the future, to be the ADF's major asset for Defence Aid to the Civil Community in times of bushfire or other emergency.



1983 - Bailey bridge installed at Framlingham by 105 Sqn using the original piers of the burnt-out bridge. (Swan Street Sappers)

The eighties saw many changes in the administration and organisation of the Army Reserve. In particular, the Supplementary Reserve system was being phased out as sponsoring government departments were rapidly changing, and in some cases wound up. Increased outsourcing by government departments and downsizing led the way for the demise of the system that had provided a significant technical capability to the Army since after WW2.

Units gradually changed to Normal Conditions arrangements. Integration also meant that members were more widely employable within the broader Army Reserve.

The Regiment had a sound and credible foundation. This had been built upon a great need for the ADF to have available the best engineers in the country.

This need and subsequent transformation would bloom into the 21st century.

CHAPTER FOUR

The Foundation of Construction: The Planners (A National Resource)

All construction projects need good design and technical monitoring. As highlighted by Michael Tyquin in his 2018 History of 19th Chief Engineer Works, *Highlands to Deserts*, the art and practice of designing and building military works is one of the oldest of the engineering skills as we know them today.

"The art of engineering can be traced back to the Iron Age with primitive, but effective hill forts constructed in Europe. The great civilisations of antiquity – Persia, Greece, Rome, China and Byzantium – all exploited engineering in their conquests and military endeavours. Aqueducts, Hadrian's Wall and the Great Wall are examples of surviving works, while the pontoon bridges, temporary camps, roadworks etc. used during early military campaigns have all but disappeared, despite being an essential part of war fighting and, in later centuries, nation building" (Tyquin p7).



Colonnate street at the ancient city of Gerasa, now Jerash, Jordan. The Greco-Roman city of Jerash flourished during the Greek, Hellenistic, Roman and Byzantine periods

Independent chapters are dedicated to the "Works Service" in both volumes three and four of the official history of the Royal Australian Engineers (McNicoll & Greville). This underpins the importance of the Army needing qualified engineers and technicians to be able to plan, construct and supervise engineering projects both in peace, but especially in war.

It is interesting to note that, Greville highlights the importance placed on fortifications at the end of WW2.

"Despite the appointment of the Engineer-in Chief (EinC) in April 1942, the position of the Director of Engineer Services continued until late 1943. At that time, the Chief of the General Staff decided that the situation in Papua New Guinea demanded that the EinC become responsible for all engineer planning. In October 1943 the office of the EinC was altered to include the functions of the Engineer Services Branch. This resulted in the establishment of the Directorates of Fortifications and Works (DFW) and of Engineer Stores (DES), as separate entities, under the executive control of the EinC." (Greville p.261)

The Engineer in Chief, Sir Clive Steele, highlights as one of his key lessons from the 1939-45 War is that,

"It is essential, that in both peace and war, that RAE officers of the Permanent Military Forces be given all facilities to make themselves first-class engineers." (Greville p.261)

In fulfilling that lesson, close association with professional, commercial and government bodies greatly assist. It also highlights Sir Clive's other great lesson of ensuring that,

"Citizen Military Forces (CMF) or Supplementary Reserve (SR) be a vital part of the Army, particularly in RAE". (Greville p.839)



Institution of Engineers – Victoria

The Institution of Engineers was intimately connected to the Construction Sappers in Victoria. Several Sapper officers have been President of the Institution of Engineers Australia – Victoria. Brigadiers Bob Slater AM, RFD and Kerry McManus AM, RFD along with Colonel John Wertheimer AM, RFD have all been Chairmen of the Victorian Division Committee.

Several sapper officers played key roles on the staff of the institution: LtCol Bill Van Ree, Major John Tywford and Major John Bitcon.

Also, Major Bruce Campbell RFD, ED was the President of the Institute of Surveyors, Victorian Division.

Many members of the reserve sappers in Victoria had significant planning and design experience brought from their civilian employment. The utilisation of civilian skills and experience is critical and valuable to the Royal Australian Engineers.

ENGINEERS
AUSTRALIA



203rd Works Section

203rd Works Section (203 Wks Sect) has been intrinsically tied to the historic journey of the Supplementary Reserve in Victoria. Its role is to plan, design and execute military engineering projects. Many talented, highly skilled and experienced professional engineers and supervisors have served in this section. The section is in high demand for its ability to help provide engineer solutions in support of the nations aims. It is a national asset and resource in times of need.

Originally, it was a sub-unit of 16 Const Regt (SR) raised in 1957 under command of MAJ E.R. Myer followed by WO1 R. Kaye in 1962, LT A. Cox and WO1 W.J. Cook until 1964, LT R.H. Nye from 1965 to 1968 and LT R. Fitzwillan until 1973. Supervisors at the time included WO2 K. Lawrence, WO2 R.E. Bovington and WO2 J. Halket. Further Officers Commanding (OC) of the section included in 1974 Maj L.P. (Les) Malseed ED and LT D. Sharp in 1975.

In 1974 16 Const Regt (SR) disbanded and briefly existed as 16 Field Engineer Regiment at Ringwood becoming 7 Field Engineer Regiment and then evolving into the 4th Combat Engineer Regiment which eventually amalgamated with 22 Const Regt to form 22ER on I January 2014.

In 1976 203rd Works Section transferred to under command of 22 Construction Regiment (Supplementary Reserve). From around this time the section was a holding unit for senior NCOs and officers employed in training roles within 6 Engineer Group.

In 1991 the section returned to its primary role under MAJ L. (Les) Bull RFD for works planning and design and then MAJ M. (Martin) Thomason RFD, a Civil Engineer with the Water Board, became heavily involved with the planning and construction of the Redwood Bridge in Warburton that was opened in March 2000.

MAJ P. (Peter) Mercoulia was OC in 2007 and 2008 along with CAPT Trevor Simpson-Bull and LTs Scott Amery and Aaron Slight. Other section members around this time included WO1 Gary Lewis, WO1 Neil Christie, SGT Ricky Morris, CPL Peter Borzdynski and Sappers John Farren-Price and Michael Woods.

Long serving Architectural Draftsperson, CPL Peter Borzdynski, was originally an ARA soldier who had work extensively in the Army Works service, finally serving with the Chief Engineer Southern Victoria based at Watsonia.

Warrant Officer Class One Noel Tipton had retired from the Regular Army and brought with him a wealth of military construction supervisory skills to the Section. He was actively involved in numerous defence projects. Later he was promoted to Captain and commanded the section. Another well qualified supervisor within the section was Warrant Officer Class One Neil Christie. From 2014, 203rd Works Section became a sub-unit of 22 ER. It regularly deploys individuals to assist in broader RAE projects both at home and abroad.

In 2017, Maj Russell Collins recommended that: *"203 Works Section be placed under command of 105 CS"*. The CO 22 ER at the time, LtCol Michelle McCormack (an ex-ARA Civil Engineering officer who had deployed to both Timor Leste and the Tsunami in Banda Aceh, Indonesia with 19 Chief Engineer Works) agreed.

As explained by Captain Noel Tipton.

"It made a lot of sense. As the Regiment had only one construction squadron, the OIC 203 Works Section should be the Construction Officer (CONSTO) for the squadron, and the other section members should form the Works Office of the squadron. The CO agreed, and so it was!"

The Section's establishment consisted of three Officers, four Warrant Officers and a Corporal consisting of a Captain Officer in Charge/Construction Officer, two Lieutenant Project Officers, a WO1 Manager Works, three WO2 Works Supervisors (horizontal, vertical and services) and a Corporal Draughtsperson. Its role is to plan, design and execute military engineering projects. Members of the section have deployed to numerous locations around Australia and abroad.

WO1 Neil Christie, a Timor Leste, Papua New Guinea, and Antarctica Veteran, became a Supervisor Construction within 22 CR and 203 Works Sect and has served in that role for 47 years. He retired in 2021. The story of his journey in the Royal Australian Engineers featured in the 2021 winter edition of *Sapper Summit*. It summarises well, the capability that resides within the reserve elements of the Corps.



On 13th October 2013 at Oakleigh Barracks, Noel Tipton was presented with his 3rd Federation Star by the Chief of Army (LTGEN Simon Stuart, AO, DSC). Accompanying LTGEN Stuart was the Regimental Sergeant Major Army Kim Felmingham, NSC, OAM.

Neil Christie, A Lifetime as a Military Construction Supervisor – 203 Works Section

As a military construction supervisor, Warrant Officer Class One G.N. (Gregory Neil) Christie spent much of his military life deployed to Papua New Guinea and far-flung corners of remote Australia.
His naturally laconic style coupled with incisive technical knowledge has been greatly appreciated by the people whose projects he helped supervise. Neil co-ordinated many remote community projects utilising a lifetime of construction and supervisory skills gained as a sapper over 47 years.

Born in Melbourne in 1949 and attending Coburg Technical School, he was encouraged to extend his knowledge of both physics and mathematics. He yearned a technical career.

To deter bullies, he also joined the Police Boys Club and learned Taekwondo. This Korean martial art proved useful (on two occasions) and led to his sports teacher (Hawthorn football legend - John Kennedy Senior) recruiting Neil's sporting prowess to ultimately win the Victorian Championship U15 Breaststroke swimming finals.

A week before he turned 16, Neil was accepted by the Imperial Chemical Industry of Australia & New Zealand company (ICIANZ – later ICI and ultimately Orica Ltd.) in Deer Park as an electrical Apprentice on a wage of one pound and 15 shillings (A$3-50) a week. Ironically, the ammunition factory made Gelignite and TNT – an interesting training for an aspiring Sapper.

Later, at the Yarraville factory chlorine gas was manufactured and compressed into liquid for water purification. Neil later pondered that: *"this knowledge and experience had proved invaluable in later years"*.

When *"he was only 19"* Neil registered for the newly introduced (National Service Act 1964) compulsory national service in November 1969. As he had not completed his Apprenticeship his registration was deferred to June 1971. Having now completed his electrical apprenticeship with ICIANZ Neil presented himself to the recruiting centre in mid-1971 to be told ***"the Army did not need tradesmen, just soldiers"*** and was given an "Indefinite Deferment Notice".

Instead, he married his sweetheart Sandy in December 1971 and embarked on married life to ultimately celebrate their Golden Wedding Anniversary (50 years) in 2021.

Neil commenced his own electrical contracting business but crawling through roofs fixing other people's problems re-ignited his yearning to join the Army. Being "Corps enlisted (4/73)" as an A Grade Electrician ***(the Army had decided they did need tradesmen after-all)*** on 4th July 1973 Neil underwent Recruit Training at the 1st Recruit Training Battalion at Kapooka with 22nd Platoon. At 23, he was the oldest Recruit in his Platoon and helped "guide" some of the younger recruits *"to knuckle down and get through their time in the Army"*.

His initial posting with the Australian Regular Army was with 18th Field Squadron, 3rd Field Engineer Regiment based in Townsville. Because cyclone Althea had devastated far North Queensland just a few years previously (Christmas 1971), much re-building work was still needed.

Sandy and Neil moved to Townsville and by June 1974 their daughter, Fiona, was born in Mater Hospital. Although a corps enlisted Electrician, he was soon "informally" promoted Lance Corporal despite not having completed his Initial Employment Training at the School of Military Engineering (then located at Casula in Sydney).

In late 1974, he reverted to Sapper and undertook this course and became fully qualified. Returning to Townsville, he was soon re-promoted to Lance Corporal (17 October 1974).

Life in Townsville was tough for the newly married couple with a new child. Lance Corporal Christie was often away at High Range or responding to numerous electrical crises around the country including the 6th Signal Regiment STRAD facility in Simpson Barracks in Melbourne. Neil was promoted Corporal in November 1975. Along with numerous attachments to 1RAR and 2/4 RAR, and the distance from Sandy's mum in Melbourne, the decision was made to discharge from the Regular Army and move back to Melbourne. Their son, Adam, was born in Melbourne in August 1976.

Now settled back into family life, Corporal (Retired) Christie still had a yearning to wear the *"baggy green skin*". In March 1978 he walked into the 7th Field Engineer Regiment (7 FER) Engineer Training Depot in Dublin Road, Ringwood East and signed up in the Army Reserve. This was a great recruitment for the Victorian Sappers, a fully qualified Corporal tradesman with Regular Army and civilian trade experience. He spent the next few years as a Corporal in 7 FER before a posting to 4/19th Prince of Wales Light Horse Regiment (4/19 PWLH) where he was promoted Sergeant on 14 June 1982. He remained with 4/19 PWLH until mid-1983 when Antarctica called.



Mawson Base in Antarctica

At Mawson base in Antarctica, Neil began his remote construction supervisory journey. He was now well qualified for this lifechanging adventure that would establish an ongoing patten for the next four decades.

The first Australian National Antarctic Research Expedition (ANARE) had deployed in 1947. As a Senior Electrical Fitter Mechanic (SEFM), Neil commenced his Antarctica adventure in 1983 and reminisces that: *"this was another dream that had caught my eye, I needed to balance my time in the far north, with some-time in the far south – so I applied for the position with ANARE."*

The position of SEFM at ANARE was highly competitive with 352 applicants from around the world applying. Neil had worked in uncomfortable and dangerous places before and had gained vast experience in power generation. As a Senior Non-Commissioned Officer (SNCO) in the Australian Army Engineers, Sergeant Christie knew how to follow instructions and solve problems, along with working within a team, and leading them.

After sailing to Mawson in November 1983 he built a powerhouse with four 110 Kilowatt, 3306 Caterpillar generators from scratch to commissioning. A formidable, and much needed, achievement.

He returned home in March 1985 to a new baby girl, Carly, who had been born just 6 weeks after setting sail. She was now walking.



Neil Christie

In 1985, Sergeant Christie was posted (most appropriately) to the specialist Supplementary Reserve unit, 39th Electrical & Mechanical (39 E&M) Squadron, who had just occupied the new Engineer Training Depot at Newborough in the Latrobe Valley. The old Yallourn Barracks had been consumed by the open cut coal mine. Newborough was now the new home of *"Sappers from the Valley"*. Sergeant Christie was then posted to the 22nd Construction Regiment, gained his Warrant on 3 July 1998, and was employed as the mechanical services supervisor.

He assumed the appointment as SSM 38th Field Squadron (38th FD SQN) at the Ringwood based 4th Combat Engineer Regiment (4 CER) in 2001. He was promoted Warrant Officer Class One (WO1) on 1 October 2002.

Joining Melbourne Water in 1996, Neil is renowned as a man who gets things done. Often at short notice, he is the "trouble-shooter" at Melbourne Water responding to numerous emergencies throughout the water supply infrastructure network supplying over 5 million people and associated industry and commercial facilities.

As a Sapper WO1 with immense construction and supervisory experience, the Army needed and utilised these invaluable skills, on numerous operations and deployments. The list is impressive and aptly demonstrates the critical value of a strong and vibrant Reserve capability within the Royal Australian Engineers.

From about 1999, with an ever-increasing workload for 19th Chief Engineer Works (19 CE Wks), particularly with projects in Timor Leste, Aboriginal communities throughout Australia along with the ever-increasing Defence Co-Operation projects with Australia's neighbours, particularly PNG, WO1 Christie's professional engineering and supervisory expertise were much needed. These skills were highly valued along with numerous trade skills. Reserve Sappers could help fill the vacuum created.

For the next two decades WO1 Christie's operational deployments contributed greatly to Australia's defence and foreign strategic outlook.

2002 OP Bel Isi. Peace Monitoring Group (PMG) Bougainville PNG,

2003 OP Citadel. East Timor, and

2012 Op Astute. East Timor.

A wide range of defence co-operation projects undertaken by WO1 Christie is impressive:

2005 Kadjina, Yakanarra, Yiyili, WA,

2006 Borroloola, NT,

2010 Ernabella, Pukatja, SA,

2007 Igam Barracks, Lea,

2014 Moem Barracks, Wewak,

2015 Taurama Barracks, Port Moresby,

2017 Moem barracks, Wewak and

2018 Air Movements facility, Port Moresby.

After 6 extensions of service to the age of 71 in 2020, WO1 Neil Christie has been awarded the Federation Star to his Reserve Force Medal for faithful and loyal service. Finally, his seventh extension of service, despite *blitzing* his BFA, was not approved by the Chief of Army after a total of 47 years of service.

His awards include:

Australian Service Medal (Timor Leste Clasp), Timor Leste Solidarity Medal and Australian Defence Medal.

At the (post COVID) annual *Sapper's Muster* conducted at Oakleigh Barracks by the RAE Association of Victoria in February 2021, Neil was farewelled in front of a crowded Drill Hall full of friends and colleagues. He also won first prize in the raffle draw!

On 23 March 2021, also at Oakleigh Barracks, WO1 Neil Christie was formally farewelled from the Australian Army by BRIG Matt Burr, Commander 4th Brigade, who awarded him a Commander's Commendation for his exemplary efforts:

"WO1 Christie's unique and vital contribution to Australia's Defence Co-operation Program with our international neighbours, numerous projects with Aboriginal communities around the country combined with several operational deployments have been of the highest order and are in keeping with the finest traditions of the Corps of Royal Australian Engineers, the Australian Army and the Australian Defence Force. WO1 Christie has been a great ambassador for his country".

The Head of Corps BRIG Matt Galton DSC, and the Corps RSM Warrant Officer Class One Sean Chainey OAM, DSM, sent their heartfelt and sincere congratulations on behalf of the Royal Australian Engineers:

"A tradesman, sapper, and soldier, WO1 Neil Christie epitomised how the skills of just one person can make a difference. In often remote and far-flung corners of the globe he nurtured and guided many successful projects that improved the lives of many."



Comd 4 Bde, Brigadier Matt Burr AM



CO 22ER, LTCOL Scott D'Rozario



President RAE Association of Victoria, Don Hughes

CHAPTER FIVE

Reserve Sappers Bloom – The Nineties

1990's – The Transformation

The 1990s transformed the Army Reserve, particularly for construction sappers in Victoria. The Supplementary Reserve system was now defunct, and most Army Reserve units were Normal Conditions. This generally meant that a sapper paraded one night a week, a weekend a month and one course or exercise each year. The focus was making the reserve a true part-time employment opportunity with easier transfer between full-time and part-time elements of the ADF.

To celebrate the unit's Fortieth Anniversary, the Commanding Officer of 22 Construction Regiment, Lieutenant Colonel George Giummarra, and WO1 Bill Fry as RSM, led a 200 strong afternoon parade at Swan Street on Saturday 8th September 1990. Several original members attended the parade including LtCol Bob Eastick (OC 104 Sqn), Maj John Standish (2IC 105 Sqn), Capt Reg Jackson (a troop commander in 105 Sqn) and WO1 Norm Dodgson (the Regiment's longest serving member). Many soldiers from the fifties and sixties arrived, some wearing well preserved uniforms.

Numerous medals and awards were presented, including a Reserve Forces Medal (RFM) to SSGT Terry Farrell, who already had the Efficiency Medal (EM). A dinner dance attended by 350 followed – with a small dining-in night at a Collingwood hotel for older officers.



Brigadier Bob Slater AM, RFD

In 1990, the Commander of 6th Engineer Group, Colonel Bob Slater (CO 22 Const Regt 1984-87), then into his fourth-year commanding Victoria's reserve engineers, ensured that the group remained well integrated and that members continued to be posted widely rather than held in the one subunit for long periods. Always alert to trends and an irrepressible 'ideas man', he detected that many other changes were imminent and, in his consultative manner, laid plans and put many into effect.

He thought hard about the move to Oakleigh, how the unit might transfer its traditions and institutions to a multi-user depot shared with other corps and might integrate with the local community and the many engineering-orientated industries there. He also faced the question – how could the Victorian engineers adapt to best serve the Australian Defence Force through the new decade, making the most of their still considerable human resources? His approach to these problems had an ongoing effect on the activities of the Regiment, particularly in the early 1990s.

To obtain the necessary equipment and to have ARA personnel attached for the first time, the SR units became 'normal conditions' units with provisions for 'special conditions' members. This change in conditions was also the inevitable result of the closing down of the various sponsoring authorities. Colonel Slater also recognised that the public service, the engineering community and the Victorian system of trade training had all changed greatly in the eighties.

At this time, the various sponsoring authorities were re-organising and their responsibilities largely passed over to private enterprise. The CRB remained, in its new format as VicRoads, but even it was subject to the 'user pays' principle and, therefore, its support became practically non-existent. By the end of the 1990s, 22 Regiment's only source of recruits had become 'the open market', where they competed with all other ARes units. In 1990, the Regiment was in camp in October but dispersed through three States.

Captain Bob Burnell, with WO1 Graeme McCormick as his SSM, took 105 Const Sqn to Murray Bridge, SA, to erect a Lysaught hangar for vehicle storage, construct a laundry block, and upgrade a three-kilometre stretch of road in the extensive mallee woodlands of this training area.

A troop-sized detachment went to Adelaide, billeted at Keswick Barracks, and built a single-span timber bridge across a creek in the Adelaide parklands. The bridge was duly opened by the Lord Mayor of Adelaide. Another detachment at Warradale and Woodside for a week each, building aggregate storage bins.

At Monegeetta, just north of Melbourne, 106 Const Sqn worked at the Army's vehicle-testing area, with Captain Peter White in command and WO2 Printz as SSM, on roadworks, earthmoving, storage bins, service pit and training facilities.

At the Buckland training area in Tasmania, 107 Const Sqn under Captain Bruce McClure, with plant operators from other squadrons, built a grenade range and access road; WO1 Cliff Parfitt was the SSM.

The Victorian Engineer organisation at the start of the nineties consisted of:

Headquarters 6th Engineer Group, 91st Forestry Squadron, 203 Works Section, 39 Electrical & Mechanical Squadron and 80 Quarrying Squadron. 7 Field Engineer Regiment (4 CER in July 1995 then 22 ER in Jan 2014) with 8, 10 & 38 Field Squadrons. 22 Construction Regiment (22 ER in Jan 2014) with 105 & 106 Construction Squadrons. 7 Engineer Support Regiment (7ESR) was raised in 1992 with 55 Resources Squadron and 39 Electrical & Mechanical Squadrons. 7 ESR disbanded in 1996. 55 Resources Squadron amalgamated with 105 Construction squadron in 1999.

A revitalisation program was initiated in the mid-1990s that transformed the Reserve, and unbeknown at the time, proved invaluable for the significantly increased tempo of military commitment by Australia globally in the new millennium.

1991 Swan Song: Swan Street to Oakleigh

In 1991 the Victorian Engineers moved from the Swan Street Depot to a new purpose built "multiuser" depot (MUD) at Oakleigh Barracks in North Road, Oakleigh South. The 'Swan Street Depot" had been the prime home of Sappers in Victoria since 1934. Many fond memories were enshrined there with not only significant training activities, but the depot had also been used as an assembly area for many deployments and operations.

Combined with this military use, the depot had provided a significant venue for social activities. All messes were very active and the Old Sapper's Association of Victoria had established well-attended clubrooms. The Swan Street Depot was eventually demolished in the mid-1990s, to make way for the City Link Project works. The site is now marked by a stone plaque, placed by the RAE Historical and Heritage Committee, with assistance of members of 22 Construction Regiment.

The ceremonial transfer to the new Barracks in North Road, Oakleigh, after 41 years, was coined the ***'Swan Song'.*** This moving parade at Swan Street, took place on Sunday, 3 November 1991. Around 500 attended, including a 150-strong contingent from the Old Sappers Association and numerous retired members of various RAE units. The range of medals was vast, and many retired marchers wore decades-old uniforms.

The Army Reserve units on parade were HQ 6 Engineer Group, 22 Construction Regiment, 91 Forestry Squadron and 203 Works Section, for whom this was the last day of their annual camp held at Puckapunyal. Brigadier Ian Gilmore OBE, The Representative Colonel Commandant and old friend of Victorian sappers, reviewed this historic parade. A serving soldier and an old sapper lowered the 6 Group flag and handed it to Jim Muir, President of the Old Sappers Association, for safekeeping until the opening ceremony at Oakleigh Barracks a month later. Owen Pollock gave an emotional speech on behalf of the Old Sappers Association.



The 6 Group flag being handed to Jim Muir for safekeeping

The 'Swan Song' was the last opportunity to present awards at Swan Street and several soldiers received medals during the parade. Sadly, the old Depot changed little over the next several years. The Swan Street buildings looked derelict, with panelling and fittings partly stripped. Both the engineers and gunners' facades looked rather gap-toothed as their crests were removed 'quietly' by sappers in a tricky operation.

A month after 'Swan Song', on Sunday 1 December, Senator Robert Ray, Minister for Defence, opened the new **Oakleigh Barracks**. Guests included Lt Gen John Coates, Chief of the General Staff, and Councillor Gloria Kneebone, Mayor of Oakleigh.

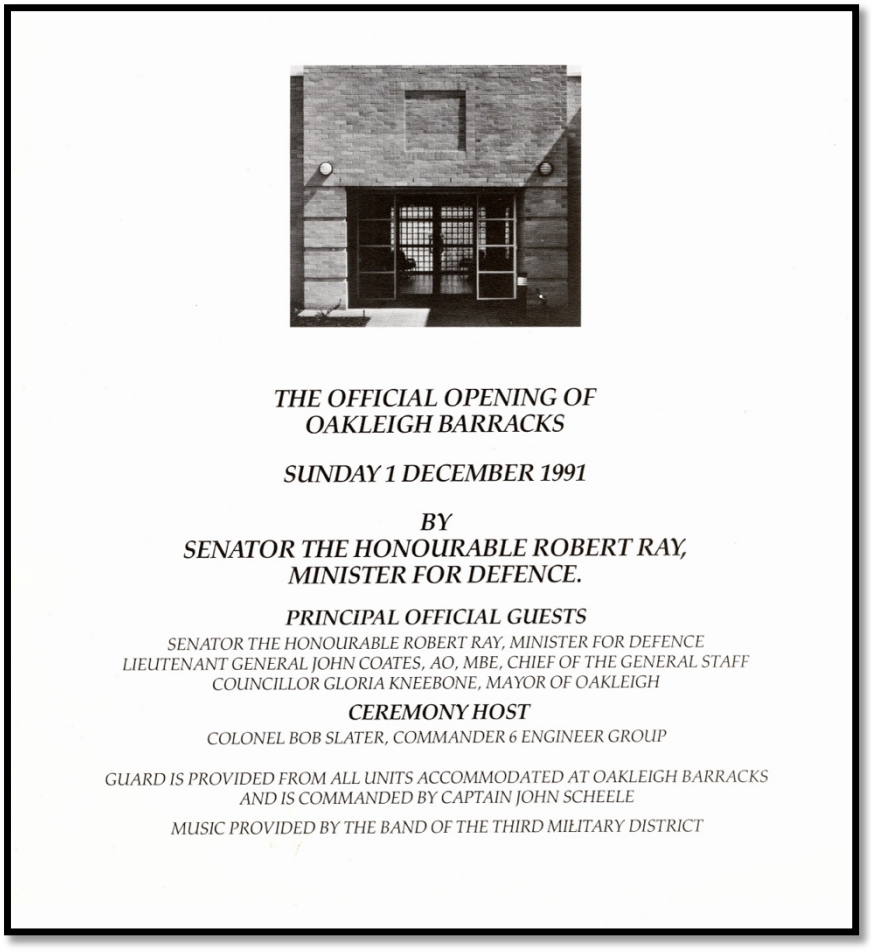
The Old Sappers had returned the 6 Group flag early that morning. In a brief ceremony, it was raised to symbolise a new era for sappers in Victoria. A formal and well-rehearsed parade followed with a half-guard of fifty soldiers under Captain John Scheele accompanied by the Third Military District Band.

Originally an abattoir site in semi-industrial Oakleigh, the Barracks are situated on a 3.5-hectare triangular site with a pleasingly open layout thanks to the set back from the railway and North Road. The first 'multi-user' styled depot in Australia, the main barracks comprise a two-storey administration block connected to a training wing.

The whereabouts of the 6 Group flag is unknown.

Dominating the training wing is a parquet-floored gymnasium/drill hall connected to a superb kitchen, classrooms, syndicate rooms, ablutions and three recreation rooms (officers, sergeants, and other ranks messes). Also featuring was a superb galleried lecture theatre or 'model room', and a purpose built, independently funded, Old Sappers Association clubroom abutting the gymnasium. These clubrooms are now a Unit History room. A large utilitarian Quartermasters store, garages, repair facilities, plant yards, carpark and a modest parade ground complete the complex.

The annual camp had been conducted at Puckapunyal where the Regiment built roads (including Paddy's Way), culverts, and a Lysaght hut at the range camp. For the unit, still commanded by Lt Col George Giummarra along with the RSM, WO1 Bill Fry, 1991 had been a pivotal year. For the remainder of the 1990s however, more change was to come.



THE OFFICIAL OPENING OF
OAKLEIGH BARRACKS

SUNDAY 1 DECEMBER 1991

BY
SENATOR THE HONOURABLE ROBERT RAY,
MINISTER FOR DEFENCE.

PRINCIPAL OFFICIAL GUESTS

SENATOR THE HONOURABLE ROBERT RAY, MINISTER FOR DEFENCE
LIEUTENANT GENERAL JOHN COATES, AO, MBE, CHIEF OF THE GENERAL STAFF
COUNCILLOR GLORIA KNEEBONE, MAYOR OF OAKLEIGH

CEREMONY HOST

COLONEL BOB SLATER, COMMANDER 6 ENGINEER GROUP

GUARD IS PROVIDED FROM ALL UNITS ACCOMMODATED AT OAKLEIGH BARRACKS
AND IS COMMANDED BY CAPTAIN JOHN SCHEELE

MUSIC PROVIDED BY THE BAND OF THE THIRD MILITARY DISTRICT

Oakleigh Multiuser Depot Official Opening

1992 Full-Time ARA 2IC

Following on from Brigadier Ian Gilmore as the Colonel Commandant of Southern Command, Colonel John Wertheimer assumed the appointment of Colonel Commandant for a newly created Southern Region on 2 July 1992.

Appointed Commanding Officer in 1992 was Lt Col Geoff Spencer, a Scheyville graduate, who was a regional manager with the Rural Water Supply Commission. Resident in Shepperton, he was soon offered a job with the World Bank in Washington. Lt Col Ian Campbell took over for a short period as CO of 22 Regiment with WO1 John Printz as his RSM.

Ian Campbell, a former regular RAE officer and Vietnam Veteran, had served at the RSME in the United Kingdom and subsequently joined the SEC. John Printtz, also ex- ARA and latterly a state public servant, had been a leading figure throughout Victoria advocating for Vietnam veterans and RSL affairs for which he was awarded an OAM.

The 1992 annual camp, EX HARDCASTLE (10-25 OCT 92), again at Puckapunyal, divided into two sections: one week soldiers built the Transfield Lines of Communication bridge, and the other they greatly enjoyed instruction in various building trades, such as carpentry, plumbing and bricklaying, from the staff of the Army TAFE College, Wodonga.

Lt Col Bill Ross, also ex-ARA and now a consulting engineer, assumed command mid camp and remained CO until early 1996. Squadron commanders and SSMs in 1992 were respectively; 105 Squadron - Maj Shane O'Keefe along with WO2 Stuart Hipwell, and 106 Squadron - Maj Bruce McClure and WO1 Rex Howes.

In 1992, for the first time, 22 Regiment had an ARA second-in command, Captain Kevin Earle. He improved the organisation and administration and made an extremely positive contribution. Major Alan Smeaton took over this role in mid-1993, with Bill Ross still CO and WO1 John Printz as RSM. Major Alan Smeaton had been commended for his work as Officer Commanding the Welfare Coordination cell at Land Headquarters mounting numerous contingents and individuals for service overseas particularly the United Nations Transitional Authority, Cambodia. He excelled at providing quality direction for all Victorian Sappers over the next few years.

The Regiment since 1992 has enjoyed having Australian Regular Army (ARA) fulltime officers and soldiers posted to key appointments.

1993 Warradale

Colonel Howard Ellis assumed command of the Logistic Support Force Engineers in 1993 along with Major Don Hughes as the Staff Officer Grade Two (Operations).

Colonel Ellis had commanded Melbourne University Regiment (MUR) and had extensive civil engineering experience with VICROADS. He had broad experience within the Regiment and had also commanded 107 Plant Squadron (Heavy). Major Don Hughes had served in PNG and most recently as OC "Bravo" Company at Kapooka. Don replaced Major David Taylor who had previously served in SASR.

Essentially the Logistic Support Force Engineers replaced 6th Engineer Group as Formation Headquarters commanding Engineer assets in Victoria.

The regiment and its two squadrons, with attached Tasmanian RAEME and MED support, found themselves again in SA for the 1993 camp; 105 Squadron was at Warradale under Maj Bob Burnell and WO2 Peter Bloor, and 106, under Maj Bruce McClure and WO1 Rex Howes, at Murray Bridge.

At Warradale the troops built a Lysaght hangar, constructed hard standing for a petroleum point, demolished two old workshop buildings, one for re-erection at Puckapunyal, and prepared a 200-metre length of road for sealing.



The Lysaght Hangar being erected

Peter Bloor's long and dedicated military career ended on his fifty-fifth birthday halfway through camp, and he handed over to WO1 Spencer Goss. It was an emotional moment for everyone, especially for the adaptable and very knowledgeable Peter Bloor. It was the last camp for two other veterans from 105 Squadron, WO2 John McNabb and SSgt Ian Kimber.

At Murray Bridge the troops built an island in a reservoir to provide wildlife habitat and constructed several kilometres of water pipeline, with associated telephone and electricity cable, through belts of tough dune limestone. Because of the area's long use for military training, soldiers had to clear worksites and easements using mine detectors and prodders.

1993 also saw a memorable Waterloo Dinner conducted by the Old Sappers Association at Oakleigh Depot with Sir Edward (Weary) Dunlop as the guest of honour. His last public appearance paid tribute to the professionalism of the contribution made by the Engineers.

A TRIBUTE TO PROFESSIONALISM

By Brigadier I.G.C. (Ian) Gilmore OBE, OAM, MID, (retd)

"One of the last appearances of the late Sir Edward "Weary" Dunlop was as the guest of honour at the annual Waterloo Dinner of the Old Sapper's Association of Victoria, on Sunday 6 June 1993, less than 4 weeks before his sudden death.

On the occasion, Sir Edward addressed the Old Sappers and their guests in his customary, relaxed and inimitable way. He delivered an absorbingly interesting dissertation, which covered matters from his own vast and worldly experience. He then offered some significant conclusions he had reached on some of the subjects he had pondered on for many years, as he approached his 80th birthday, which he was not to celebrate.

Drawing together the various threads of his address to us, Sir Edward said he had pondered, over the years, the relative contribution of engineers and doctors of medicine to the well-being of mankind. He observed various facets of the activities of both these noble professions over many years, in times of war and in times of peace, in tranquil and in the most turbulent and hazardous situations. Ultimately, he told us, he had decided that, without detracting from the magnificent and massive contribution of the medical profession to mankind, he had come down on the side of the engineers. He believed that, over the years, engineers had contributed more than any other profession to the well-being of humanity.

This genuine tribute from such a revered and erudite person should be recorded, if for no other reason than, to encourage members of both the engineering and medical professions to recognise their inter-dependability and to inspire them to emulate the deeds and endured dedication of Sir Edward Dunlop to the well-being of his fellow man and peace on earth.

Sir Edward will be remembered as one of the greatest Australians of all time."

Brigadier Ian Gilmore enjoyed a distinguished military engineering career serving in Japan, Korea, Malaysia and Vietnam. He was the Commandant of the Australian Counter Disaster College, Mount Macedon and the Colonel Commandant Royal Australian Engineers, Third Military District 1986-91. His son, Major General Peter "Gus" Gilmore AO, DSC, commanded special forces in Afghanistan.



Old Sappers Association – Waterloo Dinner 1993

Sir Edward "Weary" Dunlop, Mrs Elsie Ferguson (wife of member), Major D.C. (Don) Hughes (HQ LSF Engineers) and Mr Ray Knight BEM, Life Member, Old Sappers Association of Victoria, Oakleigh Barracks.

1994 Around Victoria Exercises

In 1994, Lt Col Bill Ross continued command, with Maj Bob Burnell OC of 105 Squadron and Maj Hans Proebsting OC of 106 Squadron. The RSM was Rex Howes, along with SSMs WO1 Spencer Goss and WO2 Gordon Templeton.

For the annual exercise the regiment dispersed throughout Victoria, with vertical and horizontal construction projects at Macedon, EDE Maribyrnong, Newborough, Portsea, Puckapunyal, and Williamstown.

A continuing project was the erection of Lysaght hangars for the tank museum at Puckapunyal. Several plant operators, drivers and tradespeople also worked at RAAF Base Scherger near Weipa on the Cape York Peninsula.

1995 EX K95 - Weipa

In 1995, for the annual field exercise the regiment deployed to Weipa on EXERCISE K95. Attached were 55 Resources Squadron from Ringwood (comprising remnants of 91 Forestry Squadron, 107 Plant Squadron and 80 Quarry Squadron), OC Maj Cliff Parfitt with WO2 Bourke as SSM, and 39 Electrical and Mechanical Squadron from Newborough, OC Jamie Hunt with WO2 Spencer Goss as SSM.

On K95, 55 Resources Squadron undertook the initial site set-up, Vital Asset Protection, and identification and planning of the infrastructure and tasks; 39 E&M Squadron and 105 Const Sqn provided ongoing infrastructure and task maintenance and development.

106 Const Sqn attended a courses camp at SME and redeployed the vehicles and equipment from K95.

At the end of 1995 both 55 Resources Sqn and 39 E&M Sqn were amalgamated with the Regiment.

Maj Peter Zambory was OC 105 Const Sqn with WO1 Rick Hedger as SSM.





1996 AFX – RAAF Base East Sale - Monegeetta

In 1996, the AFX was at RAAF Base East Sale and consisted of combined courses and works tasks including the extension of the existing golf course from 9 holes to 18 holes, the complete refurbishing of the clubhouse (building, electrical and plumbing works to the internal walls, ceilings, kitchen, toilets and insulation) and Vital Asset Protection of key facilities on the Base.

Other main activities were construction of a roads network at Monegeetta for driver training and vehicle testing, MGB training conducted by each squadron culminating in the building of a double-storey MGB, and watermanship conducted using the Naval Cadet TS Latrobe at Newborough and Lake Narracan.

For 1997, 105 and 106 Const Sqns amalgamated to become 105 Construction Squadron.



1997 Cultana - South Australia

Moving to the El Alamein training area at Cultana, near Port Augusta in South Australia, 105 Construction Squadron deployed for their annual exercise by road and air in the second half of 1997.

Major D.C. (Don) Hughes was the Officer Commanding. He had recently transferred from the Regular Army to the Active Reserve. Don had served on exchange with the British Army in the UK, on Defence Co-operation Projects with 12 CE Works in PNG, with the UN in Mozambique and later, as a civilian in Banda Aceh (Indonesia) helping AUSAID and OXFAM (UK) in reconstruction after the devastating Boxing Day 2004 Tsunami.

His second-in-command and Works Officer, Captain Noel Tipton, was a highly experienced and respected construction supervisor who had served in Rhodesia, and later Timor Leste. The Squadron Sergeant Major was WO1 Dave Rundell, an experienced reserve sapper warrant officer, who went on to be the RSM of the Regiment.

Maj Hughes remembers that:

"The squadron was excited about an exercise interstate. The advance party deployed by road convoy, overnighted at Murray Bridge, and the main body deployed by RAAF C130 aircraft.

A multitude of tasks awaited us. At the Cultana Range complex - we undertook construction of a block masonry grenade range, a huge road cutting overlooking Spencer Gulf, various road and quarry upgrades, an obstacle course, and upgrades of the rifle and anti-armour ranges."

Principles of the Employment of Engineers

The Commander of the Logistic Support Force, Brigadier D.I. (Doug) Tyers and his RSM, WO1 (Danny) Hawkins OAM (who had been a RAE Training Warrant Officer at the Ringwood Depot in 1987) visited the exercise. They were hosted by the CO 22 Const Regt, LTCOL Bruce McClure RFD, (who had been the OC of both 106 Const and 107 Heavy Plant Squadrons). All were most impressed with the amount and quality of the work undertaken in the harsh semi-desert conditions. Captain Noel Tipton remembers that:

"On a high vantage point overlooking the whole range peninsula area, the Sqn HQ briefed the Commander of the LSF. This included a safety brief advising of the snake danger in the area along with a very impressive, purpose built, magnetic, fold out and portable whiteboard to list current works projects and taskings. Comd LSF was very impressed with this tasking board and decided his HQ would need the same for its taskings.

When the OC was giving his briefing on the larger exercise scenario, he mentioned that the Sqn was utilising the principles of the employment of engineers. The Commander asked the obvious question: What are the principles of the employment of engineers? Luckily, the OC had just returned from his Regimental Officers Advanced Course (ROAC) and was able to rattle them off with examples, in a confident and robust fashion!"

The principles for the employment of engineers have been forged from bitter experience in many far-flung corners of the world by a multitude of Armies. They are:

Centralised control with decentralised execution,

Early warning and reconnaissance,

Priority of work,

Concentration of effort,

Continuity of effort,

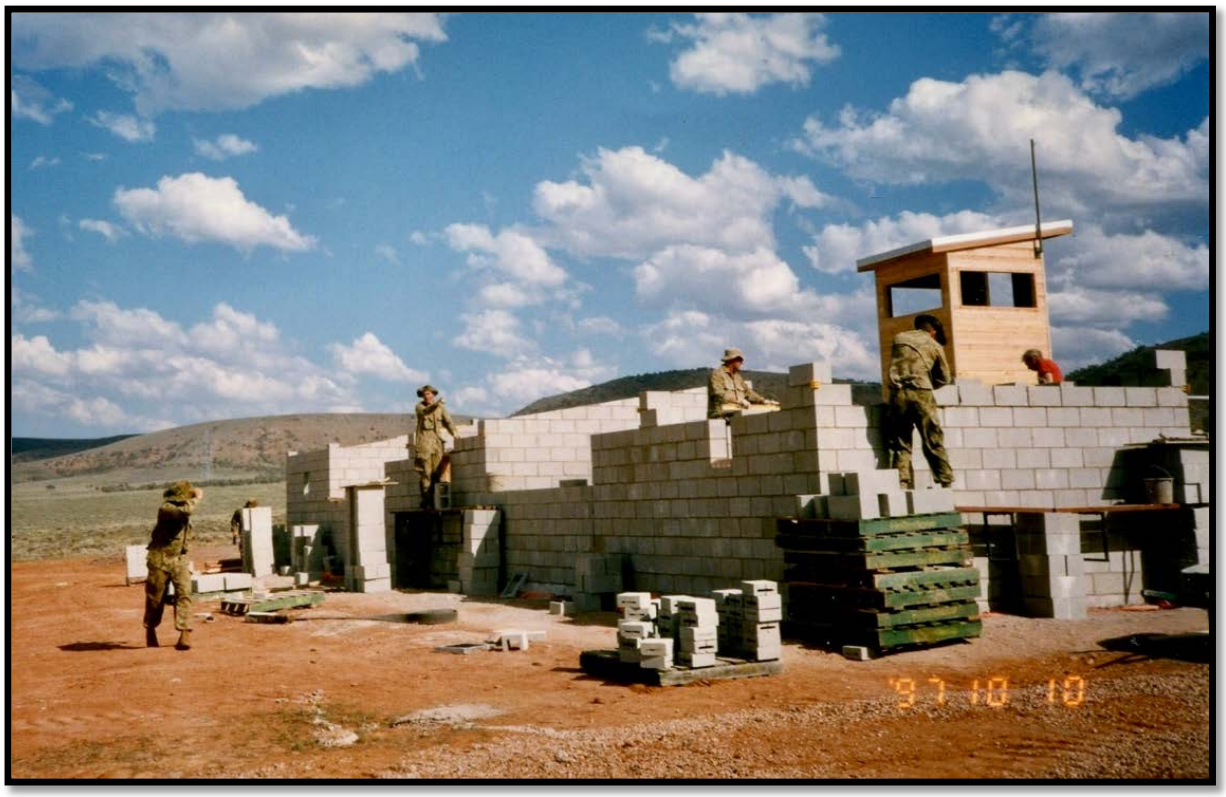
Economy of effort and

Protection.

The SSM, WO1 Dave Rundell, also remembers the year well:

"In 1997 both 105 and 106 Const Sqns amalgamated to become 105 Const Sqn. The annual field exercise (AFX) was in Oct that year – RHQ, 105 Const Sqn together with 39 ESS Sqn deployed to Cultana SA by C130 and road convoy.

The tasks carried out included road maintenance and quarry refurbishment: construction of a grenade range, a Pairs Battle Range and Assault Grenade Range, anti-armor firing points, the rotation of sections through infantry minor tactics courses and a small arms range shoot. The sappers worked hard on a variety of very real projects in a harsh environment. Morale was high and we had no disciplinary problems"



Constructing the Grenade range at Cultana October 1997

All exercises at this time were alcohol free. Obligatory readiness requirements for fitness, medical, welfare and military competencies etc were conducted ruthlessly. Despite this, LtCol McClure was able to convince the COMD LSF, that some beers should be available on the last night of the exercise, Sappers Night, to help celebrate the successful completion of numerous tasks. A great night was had by all.

Now part of the *"Logistic Support Force Engineers"* the Regiment, and therefore the Squadron, was pitched into the forefront of the ideological and doctrinal argument of whether Construction Engineers should be part of the logistic system or, part of a corps that naturally expands or contracts between combat engineering & construction engineering tasks. Ultimately, the answer to this dilemma fell on the side of the Engineers. The RAE is well able to expand or contract to execute military engineering tasks both at the forward edge of battle or in supporting areas.

A notable example in peacetime of this versatility and expansion capability, was showcased when the 4th Combat Engineer Regiment (4CER), re-vitalised in the latter half of the 1990's, constructed a "swing" footbridge over the Yarra River in Warburton. In 1999, 4 CER became focused on backfilling the vacuum created by the deployment of full-time Sappers to Timor-Leste. Construction Engineers, therefore, had to step in and complete this important community project.

1998 Bridging the Yarra: The "Redwood" Bridge, Warburton

As part of the Reserve Revitalisation program in the later 1990s, interesting and worthwhile construction tasks were keenly sought after to provide appropriate and challenging tasks for young officers, junior NCOs, and Sappers.

These types of tasks within a civilian community build invaluable skills and goodwill. They also practice construction skills not normally undertaken and necessitate associated negotiation techniques with "real" customers. This includes the ability to work in unique and different environments that can instil a deeper comradeship within the unit and engender a broader understanding of the military within the civilian community.

In 1998 the ***Warburton Advancement League*** approached 4 CER to construct a footbridge over the Yarra River to connect two walking trails in this beautiful township 100km east of Melbourne. This was a great practical and real task for a vibrant and revitalised unit who were generally used to constructing more expedient tasks. The unit found themselves involved in producing a substantial permanent suspension bridge designed to withstand a 1 in a 100 year flood!

The suspension bridge boasted some impressive statistics, including foundations totalling 85 tonnes of concrete, two 10-metre-high timber towers, using timber from NSW, a 34-metre span steel wire rope (SWR) with cables rated to 15 tonnes. All of which go into producing a spectacular structure, which blends remarkably well into its natural surrounds and provides the local community with a major thoroughfare and new landmark.



The Redwood Bridge at Warburton

With the escalation of operational commitments in 1999 with Timor, the Joint Incident Response Unit (JIRU) and OPGOLD tasks gaining higher priority for 4 CER, the Warburton Bridge schedule was starting to slip. When Combat Engineers become fully tasked it is time to call on the Construction Engineers, the fellow Victorian Engineer Regiment, 22 Construction Regiment (22 CR), Commanded by LTCOL Bruce McClure RFD, were well able to assist and the bridge was opened in grand style on 21 May 2000 and named the "Redwood Bridge" after an imposing stand of Californian Redwood trees nearby.

2IC 4CER (MAJ Martin Thomason RFD, a qualified Civil Engineer with the Water Board) liaised with CO 22 CR and a work party under CAPT White completed all elements of the construction task. Of note Martin's father was Major T.F.D. Thomason ED, (OC of 106 Const Sqn from 1962-66).

MAJ Thomason had spent innumerable hours of professional time as the structural engineer for the "Redwood Bridge" project. Part of the citation for a Commander Second Division Commendation for MAJ Thomason by Major General C.R.R. Hoeben AM, RFD reads:

"Major Martin Thomason RFD:

Your detailed planning and execution of all aspects of the design, preparation and construction of the 34 Metre suspension Bridge at Warburton has highlighted your professional and engineering skills. Your attention to detail and your technical knowledge proved to be a powerful asset to the completion of the task!"



1998 Puckapunyal, Portsea & Mongeetta

In 1998 the annual field exercise (AFX) for the REGT was held in October. 105 Const Sqn worked at Puckapunyal on extensions and refurbishment of the Engineer compound, erection of the perimeter fence to improve the security, and undertaking a continuous crusher run to provide sufficient crushed rock to complete the plant and transport yard in the new extended compound. Training included on-going military skills, navigation and RATEL (Radio Communications) and a plant course for code upgrades.

The Monegeetta driver training facility that was extended and the vehicle testing network built by the Regt in 1981, was further maintained in 1998. Refurbishment work was also carried out on the Portsea pier and jetty. Key personnel included:

OC	MAJ Peter George	Support Members
SSM	WO1 David Rundell	CAPT Noel Tipton
Ord Rm	SPR Steve Bartling	SGT Gary Edwards
	SPR Jenny Baxter	
Q Store	SPR Cindy Colbert	
Plt Tp	CPL James Colbert	
Tpt Spvr	SGT Andrew Gill	
Tp Comd	SGT Ian Buck	

1998 Bougainville Operation BEL-ISI.

Also in 1998, SPR Carl Rabie a plumber from 22 Construction Regiment, and LTCOL Robert Patterson OAM, RFD, a RAAMC Health Officer from Tasmania, were instrumental in providing potable water for the Peace Monitoring Group (Operation Bel-Isi) in Bougainville, PNG. Rob Patterson takes up the story:

"On 14 May 1998, in accordance with the role of my unit, 10th Field Ambulance (10 FD AMB), I was directed by the Commander Logistic Support Force (LSF) to provide an Environmental Assessment (EA) of the current multi nation Peace Monitoring Group (PMG) led by Australia on Bougainville. The aim of this EA was to ensure compliance of the wastewater management with current Australian Standards.

My assessment focussed on wastewater management at the main support base at Loloho wharf, the Awara township (HQ PMG) and 5 team sites located around the Island.

During my arrival brief I was also requested by the Commander PMG to also investigate the potable water supply.

The PMG wastewater management at the remote team sites consisted of basic septic tanks utilising ground absorption in all areas was found to be generally satisfactory. The exception was the large chemical loo used at the Combined Health Element at Loloho. The pump had broken down and the required chemicals were no longer available. This situation was not in accordance with the required standards and caused a significant health risk to medical staff.

My review of the existing potable water supply indicated a serious health issue. Raw water was being collected from the Bovo River downstream of several native villages. Sewage from these native villages caused significant pollution. Attempts to treat the raw water to a safe standard involved the establishment of a water point at Awara (HQ PMG) which utilised an

existing water main that passed under the Bovo river with access being obtained by breaking into the top of the 15" diameter pipe under the water level.

CPC 20 water treatment unit was attempting to treat the polluted raw water. The CPC 20 ability to provide filtration and chlorination appeared safe. The problem was a clear reading based on free chlorine analysis could not effectively eliminated sewage borne viruses and other pathogens that were not controlled by chlorine. The CPC 20 was designed to effectively treat safe raw water to a standard required for distribution. Health testing of the raw water source confirmed my concerns.

My post deployment report to the Land Commander indicated that all potable water should be effectively boiled until a safe alternative raw water source could be identified such as roof catchment.

Unfortunately, this basic Health advice was not heeded. During the following weeks the HQ PMG staff reported 60 casualties caused by an unknown virus.

I was directed by Land HQ to redeploy with a small health team back to Bougainville. The team consisted of a Health Sgt and Sapper Carl Rabie a plumber from 22nd Construction Regiment.

The best available option was to provided rainwater roof catchment which was collected and treated by the CPC 20 prior to distribution.

The work was not easy as all roof water catchment materials had to be sourced locally. Sapper Rabie was instrumental in the construction of the large gutters. He also constructed a Field Septic Tank from 200 Litre drums to allow the installation of a flushing toilet for medical staff.

This work solved the potable water issues and provided an excellent example of Engineer and Environmental Health combined capability."



This photo shows the team SPR Rabbe (left) and others Health Team members at his workstation where he constructed components to fabricate a Field Septic Tank (chamber drums) and other plumbing fittings. Loloho Base Bougainville.
SPR Rabbe's work enabled the provision of a roof catchment potable water supply off several roof areas. He also constructed a complete onsite Australian Standards compliant wastewater management system to provide toilet, shower and laundry facilities for medical personnel and the combined Health Element

1999 55 Resources Squadron amalgamates with 105 Construction Squadron

On 3 December 1995, 55 Resources Squadron and 39 Electrical and Mechanical Squadron, joined the regiment together with 105 and 106 Construction Squadrons. Command transferred to Logistic Support Force in 1993 and to Land Command Engineers on 1 July 2002.

At the same time the 39 Electrical and Mechanical Squadron was re-designated 39 Engineer Support Squadron and in 2000 changed again to 39 Construction Squadron

In 1997, 106 Construction Squadron was absorbed by 105 Squadron and in 1999, 55 Resources Squadron was also absorbed by 105 Squadron.

The CO was LtCol Bruce McClure, RSM WO1 Dave Rundell, OC 105 Construction Squadron Maj Brent Rodgers and the SSM WO1 Gordon Templeton.

The Regiment, by heritage, experience and qualification were ready to take on the 21st century

1999-2000 OP GOLD – Support to the 2000 Olympic Games

At the dawn of the Millennium, the Australian Defence Force (ADF) was strongly focused on its operational commitment to East Timor.

The ADF had first deployed there in September 1999. The response by the United Nations Security Council had been swift. It needed to stop widespread violence and slaughter in Dili and surrounding villages with resolution 1264, the establishment of a multinational peace-enforcement force. Australia was asked to lead this *Intervention Force in East Timor* (INTERFET) with assistance from a wide range of countries. The Australian public supported this military intervention with gusto and pride.

The need for both construction and combat engineers in Timor, and with impending security operations at home, the overall need for Sappers was extremely high. This operational vacuum created by Timor, needed to be filled by reserve engineer units such as 4 CER and 22 Const Regt. Luckily, the Australian Army had been working hard at improving its “readiness” in the previous decade.



4 Combat Engineer Regiment at the Sydney Olympics 2000

In the latter half of the 1990s: *"the hard work, the reorganisations, the relocations and heightened personal standards of commitment and fitness are now proving their worth. Readiness has become a byword in every aspect of our work"*

These were the words of LT GEN F.J. (Frank) Hickling AO, CSC the then Chief of Army (and a Sapper) in the Australian Army "In Profile" publication 1999. The Army had prepared itself well for these tasks, and little did it predict that the tempo of operations would remain high for the next two decades, including an ongoing commitment to not only Timor but also highly significant operations in both Iraq and Afghanistan!

In 1999, with the majority of full-time Australian Engineers deployed to Timor-Leste, Reserve Sappers had to "step up" and take on the critical responsibility of security for the Sydney 2000 Olympic Games.

In September 1999 at a function at Simpson Barracks, General Cosgrove (later to be Sir Peter and Governor General for Australia) promoted the Quartermaster of 4 CER, WO2 Dale Mitchell and long-term stalwart of the Victorian Sappers, WO2 Jim Davis, to WO1. He commented that; "*the rank of WO1 is the heart and soul of any Army!"* WO1 Jim Davis would go on to be the SSM of 105 Const Sqn from 2001 and later RSM of the Regiment

WO1 D. L. "Dale" Mitchell was one of those *"can do quartermasters!"* who had served at the Ringwood East Depot**.** Dale was later awarded, a most deserved, Medal of the Order of

Australia (OAM) in the 2003 new years' honours list for his tireless and dedicated service to the Royal Australian Engineers including in East Timor and at Ringwood East (4CER).

WO1 "Jim" Davis had served in Papua New Guinea with the banking industry and had been a long serving and outstanding sapper NCO and Warrant Officer within the Corps in Victoria. On his retirement he became the *"driving force"* behind the establishment of *the Royal Australian Engineer Association of Victoria (Incorporated)* in 2014, as its inaugural Honorary Secretary.



Jim Davis was awarded an Australia Day Award by the City of Maroondah for his tireless efforts as Secretary of the RAE Association Victoria,



In 2021, Jim Davis was presented with The Brigadier General C.H. Foott CB, CMG, Award for outstanding and significant support to the Corps of the Royal Australian Engineers

A Victorian Sapper's Journey: Captain Noel Tipton

Mirroring our society over the last half century, the Australian Army has progressed and changed dramatically.

Captain Noel Tipton's military service has spanned this diverse, and often tumultuous, period of Australia's involvement since the Vietnam era. It includes a multitude of military and humanitarian operations where the skills of the warrior tradesperson have proved invaluable.

Many underlying traits of the 21st century warrior remain unchanged. This ultimately gives the Australian soldier an edge in battle. Combined with these traits, the ability to adapt to the increasing technology complexities is vital.

The Battle of Kapyong

Noel's father, Laurie, was born in Essendon in 1927 and spent his early years working on farms in and around the Geelong area of Victoria. As Noel recalls, *"he always wondered why his father was a Geelong cats' supporter, and not an Essendon bombers fan"*. Those early days probably account for this.

Lawrence Mansfield Tipton tried his hand at professional boxing for a time before joining the Army as an Infantry soldier. Allocated to the 3rd Battalion Royal Australian Regiment (3RAR) he deployed to Korea as a Private (32280). He fought at the fierce battle of Kapyong along with many other engagements during this savage, and largely forgotten war. With battlefield promotions, he returned home as a Sergeant.

First posting to Balcombe

Now a well-respected and experienced non-commissioned officer, Noel's father decided to become Physical Training Instructor (PTI) and was promoted to Warrant Officer Class Two (WO2). His first PTI posting was to the Army Apprentices School (AAS). To meet increasing technological needs of the Army, this school had been established at the World War Two Army Camp at Balcombe in 1948.

The newly married PTI moved to Balcombe into an old, corrugated iron hut *(Married Quarter the Army said)* in 1956. Noel Tipton was two weeks old.

Noel's father had set a fine example of the traits needed by a warrior: hard work, physical fitness, great soldierly skills, all combined with camaraderie.

Frankston Technical School - enlistment

Noel started primary school at Tootgarook in 1962 when his father became the WO2 PTI at the Officer Cadet School (OCS) located at Portsea.

When his father retired from the Australian Regular Army (ARA) and gained employment at Frankston Technical School, Noel, and his younger brother Rick, both went to school there.

Yearning for the excitement of a technical and military career, Noel *"filled out the paperwork, did the testing and joined the Army straight from school at 16 years of age to become an Army Apprentice".*

A variety of trades could be undertaken. In 1972 the 3 years spent at AAS was reduced to two. The further two years of the apprenticeship were then spent on civilian and military detachments. For the Royal Australian Engineers (RAE), this occurred under command of Apprentice Squadron RAE based at the School of Military Engineering at Casula.

The suite of apprenticeships offered for RAE included Carpenter & Joiner, Plumber & Gasfitter and Electrical Mechanic. By 1973, several RAE trades were not available; Bricklayer (discontinued in 1971), Architectural Drafting (only conducted in 1957/58), Clerks (only conducted in 1955-56) and Blacksmith (discontinued in 1971).

Noel was accepted to join AAS as a 28th intake Apprentice Carpenter and Joiner (28thC&J).

The fresh-faced Apprentice Tipton well remembers his first day, 18 January 1973. He recalls *"The Army thought that I was a Fitter and Turner! It took me two weeks and an appointment with the Officer Commanding (OC) to convince the Army that I should be with the Chippies. Luckily, I had my enlistment letter that said Carpenter & Joiner. The OC still made me do another aptitude test and visit the Shrink (Psychiatrist)."*

Noel still sometimes ponders *"were these early forays into the administrative world of the Army, a critical part of my learning process?"*

The Appy experience: Balcombe 1973 -74

Overall, I had two fantastic years at Balcombe after settling in. Noel recalls:

"During the first few weeks, I along with most of my intake, thought I had made a horrible mistake. Unlike my fellow Appies (Apprentices), I was only 13kms from home, so I settled in faster than most. Everyone wanted to use my home as an approved leave address (which you needed for overnight leave). The Army got a bit suspicious in the end with the number of Appies my Mum and Dad were supposed to be hosting. In the end I had to cull the numbers down to just half a dozen good mates."

A rigorous mixture of military, educational and technical training was undertaken within a regimental environment. Sport and physical training were compulsory along with adventurous training expeditions.

Noel soon learnt that mateship and camaraderie were essential characteristics needed in the military. The synergistic effect provided by being part of a team, greatly enhanced everyone's contribution and therefore the overall achievement of the team.



1973 at Balcombe

Tragedy befalls Balcombe

Noel recalls a tragedy befalling the AAS that deeply affected many.

"My younger brother Rick joined me at the start of my second year as a 29th intake Carpenter and Joiner.

Like me, he was also awarded the top Chippy award in his first year. We had a ball together that year (1974) along with my best mate Danny Tones and his younger brother Tim. They were both from a cattle farm in Kilcoy just about an hour and a half northwest of Brisbane.

Whilst Rick was killed in his last year (11 November 1975 in a car accident), Danny also lost his brother Tim many years later to suicide, I don't think Tim ever got over Ricks death in that dreadful car crash as they were also best mates. RIP Rick and Tim."

Civilian Detachment

Around this time, 3rd and 4th year RAE Apprentices honed their skills and gained invaluable experience with both civilian and military detachments. Some of Sydney's best builders and contractors mentored these detachments and provided first rate instruction and experience for the Apprentices. Military detachments also, particularly to the ACT or Darwin, provided invaluable experience in a military environment.

"Working on civilian (civy) detachment at the Apprentice Squadron (APP SQN) at the School of Military Engineering (SME) in Casula, was great a great way to convert my knowledge and skills into practice. Until I got the news about Rick.

I was very difficult and hard to get along with over the next few months. If not for a very understanding Squadron Sergeant Major (SSM) and Apprentice Master at APP SQN, I may not have got back on track.

Things worked out with some great intervention, mentoring, compassion and understanding by the staff at APP SQN and my civy boss. I got back on track and quickly fell back into a routine.

The trade work on site was to my liking, and I was soon allocated some of the more junior apprentices to mentor, including one Alan Doyle who went on to become an officer in Armoured Corps. Just as well, Alan became an officer because he certainly wasn't cut out to be a Chippy. He and I had some very funny moments on site which usually involved him bleeding or nursing bruised bits from his numerous accidents. Steve Glanville (29th) also worked with me and like Alan became an officer, maybe I was too hard on them in that last year of mine with Mervin Jensen and his crew."

Noel reminisces that Apprentices needed good sound leadership at all levels and that this is critical to achieve the best out of individuals.

"I well remember that of all the staff who seemed to understand me best it was Sergeant Jock Shaw, he was the SSM. He loved to call me a "gangster" and a "hobo" and I liked the terms he used because I also thought I was a bit of a gangster back then.

Despite all the minor trouble I always seemed to be in he would always manage to persuade the hierarchy to give me another chance. I still remember him years later when he was an honorary life member of the Sergeants Mess at SME (he was then a civilian working in the bridging yard and later the Q store) telling all the members of the mess all the things this now WO1 got up to when he was an Apprentice. Pretty sure he was instrumental in arguing the case for me to get my preferred posting location to 2 FER, he probably knew that a few good years with some no fuss, practical Field Engineer types would be the making of me. RIP Jock Shaw".



True Love and the Planties

RAE Apprentices join a Corps of amazing diversity and skills. They also interact with most other Corps in the Army to assist in undertaking the nation's defence and strategic priorities. Underpinning this capability, are the partners and families. Noel explains.

"I met my true love Maria in my last year when she was 16. I could not attend her 17th birthday party because as usual, I was on confined to barracks (CB) for something.

She had to visit me at SME on her 17th birthday. It probably related to me and my motor bike which got me in the most trouble. I blame the plant courses that ran at SME because those lovely mounds and ditches they built in the dust bowl were perfect for my dirt bike to try out, but of course the dust bowl was out of bounds, that didn't stop us though".

Eventually marrying in 1981, Maria accompanied Noel though all the postings, deployments, and training commitments of being an Army Spouse.

First Unit – becoming a Sapper

Noel fought like hell to go to the 2nd Field Engineer Regiment (2FER) because all his Queensland mates went there, and he wanted to go with them. He had not much of an idea about what a FER did, but it was in Queensland so that was good.

He joined 24th Support Squadron (24 SPT SQN) because that was where all the tradies were. After about 3 months, the SSM of 7th Field Squadron (7 FD SQN) was down in the workshop and asked Sapper Tipton who he was, the young carpenter answered the request, and "*the SSM replied, with expletives only befitting an Engineer Warrant Officer, that he thought I was AWOL because not many tradies wanted to come to a FER. I said I only came down here because that was where they told me to come when I marched in. He laughed and said pack you kit and come with me, you belong to my Squadron, so off I went to 7 FD SQN".*

Noel moved around different squadrons over the next 3 years but generally ended back up at 7 FD SQN. He even had a time in 2 FD SQN Armoured Personnel Carrier (APC) Mounted Troop (MII3), but the Army changed their mind and handed back the carriers. Noel also did a stint (and gained his parachute qualifications) in what was going to be the RAE Parachute Troop supporting his father's old unit 3 RAR, but the Army changed their mind again.

On the home front Noel recalls,

"*Life was great, Maria had moved up from Sydney, and the Commanding Officer (CO) and Padre signed off on our de-facto relationship so we got temporary rental allowance (TRA) with subsidised rent so I could move out of the lines in with Maria off base. I decided to make an honest woman of Maria and proposed, she said yes and two weeks after our engagement I was told I was selected to go to Rhodesia".*

Zimbabwe/Southern Rhodesia

This deployment would herald an increasing focus on peacekeeping and humanitarian operations over the ensuing decades for Australia.

Not only in Africa (Zimbabwe, Uganda, Namibia, Western Sahara, Rwanda, Mozambique, Somalia, Ethiopia/Eritrea, and Sierra Leone) but also in other trouble spots around the globe including the Middle East, Cambodia, Timor Leste', Bougainville and the Solomon Islands, would Australia lend a hand. Wars were yet to be fought in Afghanistan and Iraq. In most cases, Australian Sappers would play leading and key roles.

The team from 2 FER was selected at short notice for Rhodesia and included only JNCO's and above. Predominately British, the Commonwealth Monitoring Force (CMF), numbered about 1300 and faced a dangerous and volatile situation.

Noel recalls, *"Luckily, I had picked up my second stripe that same year. We did our pre-deployment training and briefings over the next three weeks and by late December 1979 were waiting at RAAF Base Pierce in WA to fly out. A Cyclone in Mauritius held up our flights for 24 hours, but we eventually arrived in a virtually destroyed Mauritius the day after the cyclone.*

I was lucky and got to fly on the Prime Ministers jet with about 100 others. The other poor buggers went in a C130 via Cocos Islands then Mauritius and heaven knows how ever many fuel stops. We just had one other stop in Johannesburg and then straight into the military air strip at Salisbury (now Harare). My job was as a rifleman, and any other jobs the SSM decided to give me.

I remember being told that each JNCO's had to team up with a SNCO or WO as part of a buddy system that would be used when we were working in pairs. I asked my SSM, who was a Vietnam veteran, if I could pair up with him and he said that would suit him just fine.

Our first location was along the Zambezi River, and I recall it took many hours to get there via C130 and a dirt airstrip. We picked up a LTCOL guerrilla fighter as our interpreter/guide and then endured a five-hour journey in an armoured hippo truck along with our own mine proof rovers and trailers.

The whole convoy was escorted at various times by tribes of monkeys, plenty of elephants and hundreds of Kudus (which are very tasty I found out in due course). My most memorable wildlife encounter was one night on piquet with our one and only star light scope. A large female lion had been loitering around near our position and on this night decided to stop and groom herself directly ten meters to my front. My off sider was lining her up with his SLR in case she turned nasty, but she just went on her way after a couple of minutes, it was something I will never forget.

I learnt very quickly about marker panels and smoke when arranging low level drops out of C130's, this was how we were resupplied, the SSM gave me and another CPL this job. On our first drop, my mate and I were in the wrong spot when the drop was scheduled. We moved just in time. The pallets ploughed through the ground where we had been just a minute or so

beforehand, we learnt very quickly after that and made sure when talking to "Hawkeye" (Air Support) that we were in the right spot.

We later moved from this location up to another spot near the border with Mozambique to reinforce another team that was trying to cope with 3,000 of Robert Mugabe's fighters. We spent the next 3 months here until the elections.

The contingent managed to get some rest and recreation (R and R) for a couple of days and I had a very eventful trip to Victoria Falls. A truly amazing sight, I probably will never see or hear anything like it again.

One of my jobs at this location was with my buddy to patrol down to the location of one of the many battalion groups, get them on parade, line them up in ranks of eight and then both me and the SSM would separately count them. This happened at different times every day and the numbers were sent through to Monitoring Force HQ. Any discrepancies could then be used to attribute blame for incursions or fire fights that happened outside the Assembly areas. The whole idea of course was that the fighters were to remain in their designated areas, this rule was broken on many occasions with lethal consequences for both the guerrillas and the security forces.

Maria met me at Brisbane airport when I got home, and we set up house near Enoggera and life got back to the mundane job of courses, exercises, and training."



In Rhodesia

Ferny Grove - First Home

Returning from Australia's first significant deployment since Vietnam, Noel refocussed on life in the Army.

"After I got back, (early in 1980) Maria and I decided to build our first home at Ferny grove. The slab went down, and they started the frame late in 1981. Then, out of the blue, came a posting to AAS Balcombe as the Sergeant trade instructor (March 1982). Nine months later, we packed up again and moved to Bonegilla where they had just opened the new AAS. I was teaching the senior class of C & J's for 2 more years.

By then, the four of us (now with Tracy & Kelly) we were off to 17 Construction Squadron as the troop SSGT of 8 troop in January 1985. Warrant Officer courses were completed, and I was then posted to SME on promotion. I had just turned 29 years young and was working out how to bash my first caps khaki, so I didn't look to much like a sprog (brand new) Warrant Officer.

Amongst all this, Maria and I found time to get married in Jan 1981. Two days later she had to move back in with her parents whilst I did long term civil schooling at SME. The honeymoon didn't happen until I was a WO1.".

Absolute Tragedy

Tragedy again struck the Tipton family at SME in 1988. Noel explains.

"Our young son Ricky, who we had named after my brother, passed away two weeks short of his third birthday. He had been born whilst I was on my Subject 1 WO course in 1985. He had a heart defect which needed to be corrected when he was two and although the operation was a success a blood clot from the operation dislodged many months later and he didn't survive.

His funeral service was at the Old SME chapel where he had been christened only two years before. All of SME was there. It is times like these that the value of being in such a supporting institution becomes clear.

The people at SME from the Commanding Officer down to every member of staff, came to our aid in any way they could. It greatly helped our family endure the agony. We did eventually come out stronger on the other side. Over time Maria and I have now formed a view, that whatever doesn't kill you only makes you stronger. (RIP young Rick)."

In 1989, Noel Tipton was promoted to Warrant Officer Class One (WO1) and appointed as the Apprentice Master at SME. A highly technically qualified soldier tradesman, Noel had gained the best possible field, command, and operational experience available in the Australian Army in this post Vietnam era.

Quite often I was summoned to HQ Engineer Centre (which was next to Apprentice Squadron) to provide advice on Defence Co-operation tasks. On one occasion I was sent to remote Penryn Island (part of the Cook Islands) to conduct a combined feasibility study and technical

report for a proposed patrol boat base. The report was conducted, and the base was duly constructed the following year.

Noel comfortably cites being the Apprentice Master at SME as the best job he has had during his career. His sound technical building and construction knowledge, combined with well-developed soldier and sapper traits, were inspirational for generations of upcoming technical soldiers.

Since colonial times military engineers have undertaken varying responsibilities for fortifications and works. This is an enriching and practical way to give sappers invaluable experience needed in war.

Army Works Service

The Army's Work Service was now past its halcyon days of managing and undertaking much of the building and accommodation needs for Army. For example, Peter Greville highlights in Volume 4 of the RAE Corps history, *"that six construction squadrons were formed around Australia. It was one of the most important post WW2 developments for RAE"*.

This focus however was disappearing. The works function towards the end of the 20th century was in the process of being more commercialised. However, good works managers and supervisors were still needed for operational deployments and pursuing Australia's national interests. You cannot easily hire a construction supervisor who also has an intimate knowledge of the military. Noel goes on to further explain this time,

"My first posting, after the best job I ever had as the Apprentice Master at SME, was to Darwin with the Chief Engineers (CE) Branch. Our Kids loved it, but Maria hated the tropical climate. So, we moved back to old Melbourne to the Chief Engineer's office Southern Region. The office moved from 370 St Kilda Road out to Building 16 at Simpson Barracks which is now Headquarters 4th Brigade. These moves were all part of numerous ongoing Army restructures. After a couple of years, I was recruited by the RSM of 22nd Construction Regiment (WO1 Tony Johnston who went on to become a Major) and transferred to the reserves in 1995".

Noel's unique skills and experience gained during his journey would soon be a critical national resource. The Australian Army was entering a period of diverse and tumultuous operations, both at home and abroad.

This investment in training would reap a healthy profit. Noel would be at the vanguard of many deployments supporting the nation.

WO1 Tipton transferred from the Australian Regular Army to the 22nd Construction Regiment (22 CR) as a Reservist in 1995. The unit was based at Australia's first multiuser depot (MUD), an old abattoir site in the then Melbourne semi-industrial suburb of Oakleigh.

A Revitalised Army Reserve

The 1990s transformed the Army Reserve particularly for construction sappers in Victoria. The Reserve was being revitalised. The skills brought to the ADF from the civilian community were still in high demand.

The Supplementary Reserve (SR) system was now defunct, and most Army Reserve units were designated Normal Conditions (NC). This generally meant that a sapper paraded one night a week, a weekend a month and one course or exercise each year. Readiness requirements for fitness, medical, welfare and military competencies were obligatory. This made service in the reserve an attractive part-time employment option for those leaving the Regular Army.

For Noel, he could pursue his trade as a *Chippy* in civilian life, spend more time with his family, and still utilise his vast military experience in an ever increasingly busy Australian Defence Force (ADF).

After 23 years as a soldier (including 7 years as a Warrant Officer Class One) Noel was promoted to Captain in January 1996.

Annual Field Exercises

Typically, annual field exercises (AFX) were held at numerous locations around the country undertaking horizontal and vertical construction tasks, combat engineering tasks, and all arms soldier skill training. Noels skill sets and experience in all these areas was invaluable.

For example, for construction sappers in 1998 at Puckapunyal, extensions and refurbishment of the engineer compound were undertaken. At Monageeta the driver training facility was extended and upgraded whilst refurbishment work was carried out at the Portsea pier and jetty.

The need to provide advice and specialist skills to the ADF was an ongoing commitment for construction sappers. One example was Sapper (SPR) Carl Rabie, a plumber from 22 CR, who was instrumental in providing potable water for the Peace Monitoring Group (Operation Bel-Isi) in Bougainville, PNG.

An increasing tempo of operational deployments would soon become a normal feature of reserve units training and focus. Noel's unique skills and training had found an important niche for the ADF.

The Start of Two Busy Decades - Timor Leste

By September 1999, the ADF was strongly focused on its operational commitment to East Timor, later named Timor Leste.

The need for both construction and combat engineers in Timor along with impending security operations at home for the Sydney 2000 Olympic Games (OP GOLD) meant the overall demand for Sappers was extremely high.

This operational vacuum created by Timor, was filled by reserve engineer units such as the 4th Combat Engineer Regiment (4 CER) based at Ringwood East and the 22nd Construction Regiment (22 CR) based at Oakleigh.

Luckily, the Australian Army had been working hard at improving its readiness in the previous decade.

"*Throughout the 1990s the hard work, the reorganisations, the relocations and heightened personal standards of commitment and fitness, are now proving their worth. Readiness has become a byword in every aspect of our work"* wrote LT GEN F.J. (Frank) Hickling AO, CSC the then Chief of Army (and a Sapper) in the Australian Army "*In Profile*" publication 1999.

The Army had prepared well for these tasks but did not predict that the tempo of operations would remain high for the next two decades. This included not only an ongoing commitment to Timor, the wars in Iraq and Afghanistan, but also numerous peacekeeping, security, humanitarian, and domestic operations.

Filling the Vacuum

As regular Royal Australian Engineer (RAE) units and personnel rotated through the extensive Sapper commitment to operations in Timor-Leste, many Reservists were needed to bolster and backfill the multitude of sapper tasks back at home on full time service (FTS).

Reserve sappers were also needed to fill operational roles in support of our national interests. Captain Noel Tipton explains that ***Chapter 6*** details examples of his involvement in these tasks.



On 13th October 2013 I, along with several other members of the RAE Association (Vic) Inc., were honoured to be invited to attend Oakleigh Barracks to witness Noel Tipton be presented with his 3rd Federation Star by the Chief of Army (LTGEN Simon Stuart, AO, DSC). Accompanying LTGEN Stuart was the Regimental Sargent Major Army Kim Felmingham, NSC, OAM.

A JOURNEY NOT OFTEN TRAVELLED: ONE SAPPER'S JOURNEY TO TIMOR LESTE 1999 – KYM BISHOP

One sapper with a background in 22 Construction Regiment found herself in the Regimental Headquarters of the 3rd Combat Engineer Regiment (3 CER) on operations in Timor Leste.

Kym Bishop's journey as a 40-year sapper veteran was recorded in Sapper Summit, Christmas 2021. Enduring and robust friendships underpinned the journey of this determined female sapper.

The journey is partly about clearing engrained obstacles of gender and cultural bias in a post-Vietnam army. It is a journey that recognises the critical contribution women make on operations. It is also a journey that reinforces the importance of family, friends, and comrades. A story that recognises the underlying foundation of any good army; that sense of history, a respect for moral courage and a tenacity to win.

Travelling through this cultural minefield, often laced with a sprinkling of nasty booby traps, how did this 17-year-old civilian 'girl' become a highly respected and well decorated forty-year sapper veteran?

Kym Bishop provides us some of the answers with her own recollections.

"I guess it is only fitting that you are provided with a little bit of my background on how a young naïve 17-year-old girl decided to enlist in the Australian Army and then commit to serve her nation for a period of over forty years.

It may have something to do with the fact that Private (PTE) Frederick Bishop (No 475) enlisted into the Australian Imperial Forces and was assigned to the 13th Battalion, 4th Brigade. Prior to embarking on the HMAT Ulysses on 22 December 1914, he underwent training at Liverpool in Sydney and Maygar Barracks in Melbourne. Landing at Gallipoli on 25 Apr 1915, PTE Bishop later went to the Western Front as part of the 45th Battalion, 12th Brigade.

In January 1919, Sergeant (SGT) Bishop returned to Australia, discharged, and settled in Sandgate, Queensland, married and had 10 children. The ninth child being my father – Darryl Keith Bishop

My upbringing was strict, however very loving. My sisters, brother and I never went without – life was good in the Bishop household. My mother was a dedicated wife and mother of four. My father was an Executive who worked for G.J. Coles Myer Ltd. He also served in the Navy Reserve. His brothers were all in one Service or another. My father had a passion for military history.

There it is…. right there!…My Father! - this is how the young naïve 17-year-old girl enlisted into the Australian Army. My father wanted me to join the Navy. However, at the time they weren't accepting females in the Naval Reserves. So off we went to Army recruiting. I also convinced my best friend from school, Tracey Barnett, to come along and enlist too. I knew we were making a huge commitment, but it would also be an adventure!"

Kym would later walk the same ground that her grandfather had stormed on that historic landing. But first, she needed to enlist.

"After completing an aptitude, medical and psychological test – we were in! To this day I still remember signing the dotted line and swearing allegiance to my Queen and Country. It was the 1sf of April 1981.

Contemplating joining the Victorian Police Force after completing HSC, I thought of being allocated to military police (RACMP) and parading at Simpson Barracks. That would be perfect. It wasn't meant to be as Recruiting had other ideas – I was off to 56b Dublin Road Ringwood East.

The word Engineers came up – what do you mean Engineers……. engineering? I don't have a degree. I don't have a trade. I don't have the aptitude. What the hell! But the Army in their divine wisdom decided that was it - the 7th Field Engineer Regiment (7 FER) and 22nd Construction Regiment (22 Const Regt) became my military homes for the next 18 years."



Kym Bishop

Back in the early 1980s females were not permitted to conduct drill with weapons. It was illegal for gays and lesbians to serve, and females were not allowed to be allocated to the RAE Corps. Generally, females in the Reserves were tolerated, and considered weak and more of a hindrance than a capability. They were often referred to by derogatory names, however,
"I could honestly say that my time at 7 FER and 22 Const Regt were some of my best years of my military Service – we had some of the best COs (LTCOL Colin Bowater) and Cadre Staff (WO2 Eli Sleiman, Chief Clerk) and Instructors (SGT Rex Howes, CPL Kim Howes, CPL Andrew Daly, CPL Wayne Crowe, and CPL James Davis - just to name a few).

In my experience, females were respected. They were afforded the opportunity to undertake RAE initial employment training (IET) at 8th Field Sqn and then were permitted to advance to 10th Field Sqn. We were allowed to conduct drill with weapons and could participate in whatever the male soldiers were training in. As far as the Unit was concerned if you wanted to train as an RAE sapper, it was open to all genders. To their credit, the Unit even turned a blind eye to our lesbians."

Many soldiers often relish the unique and powerful friendships they make in military life. Kym's journey highlights this.

"I am not sure how the Army allocates soldiers to accommodation. During my advanced initial employment training (IET) at the School of Military Engineering (SME) in October 1982, I phoned home to tell my parents that I have been put in a room with a girl I didn't know and wasn't sure if we would get on. Just another one of the challenges thrown to us by the Army."

"Apparently, this female Sapper did the same thing and phoned home about the same issue. One thing I love about being in the military is that we meet and form friendships with some amazing people – for life! Sapper Amanda "Mandy" Wilkinson has been my best friend for forty years."

"Back in the day we were as "thick as thieves" and were called the "Sapperettes". On one exercise, somewhere in the wilds of country Victoria, it was common in the early 1980s to have a few quiet drinks at the end of a hard-working day. Naturally, no alcohol was allowed in the hoochie lines. After a particularly hard day, a snap inspection was conducted by the Adjutant after hearing late night party noises! Miraculously, no incriminating evidence was found. Somewhere out in the wilds, there is a 35-year-old bottle of port neatly buried. A real collector's item."

"To this day we are still best friends and still get up to mischief. We speak to each other two or three times a week and go on holidays once a year!
The other great thing I cherish about the military, is the diversity of people. Whether senior or junior, male or female, city or country, rich or poor all soldiers share common bonds and common hardships"

"I have met a lot of interesting, talented and dedicated people who have become good friends during my time in the Reserves; WO1 Megan White (aka Dosser), SPR Bodo Boettcher, CAPT Eli Sleiman, SGT Les Norton, CPL David Conlan, WO1 Richard Vinen and WO1 James Davis (just to name a few)."

"At 7 FER we would parade each week and every training weekend – rain, hail or shine we were all there. In those days you had to submit a leave pass and have a good excuse not to attend; otherwise, it was "front and centre". "

"We worked hard but we played hard. We would also hang out on weekends, birthday parties, engagements, and other social events – the Army Reserves back in the 80s was like your family. A normal week for us was parade on a Wednesday, go to the Boozer, then onto Ringwood Lake and then finish up at Denny's at some ungodly hour, for toasties and fries. I am sure my civilian employer noticed a sick leave trend – Thursdays!"

A much welcome cultural change in defence began to emerge at about this time. Particularly with a much more sensible approach to physical and mental wellbeing. Training, however, remained paramount.

"Training weekends and Exercises were great! We got to do things that civilians only dreamed of from building bridges and then blowing them up (FACIMUS ET FRANGIMUS), mine warfare, water purification, field defences, roads & airfields, weapon handling, infantry minor tactics, command post duties and radio/telephone procedures. The list is nearly endless."

"In the 80's I had the opportunity as a Section Commander to lead a female section in the 3rd Military District (3MD) Military Skills Team competition. About 20 or more teams entered from around Victoria. We came 11th, beating a few infantry teams!"

"Although, I did think at one stage I had a mutiny on my hands whilst conducting a night navigation exercise (NAVEX). It was 0300 hours, we had already completed the obstacle course, swam with improvised flotation through freezing water, and marched in full kit with weapons from first light the previous morning. We still had a couple of check points to go and could therefore gain extra points"

"We had a big day ahead of us. Sleep was required to perform this last physically challenging activity. When I mentioned perhaps just one more check point – I am sure I heard bayonets being fixed on rifles (SLRs). It was time - the Section had given their best and I knew it was time to rest them up. When we finally finished, I remember thinking "never again". I could barely walk. However, it only took one beer back at the Boozer in Ringwood to convince me otherwise. I was so proud of the section. The military gives you great opportunities to discover what "real leadership" is all about."

"By the mid 1980's it was time to get a recognised trade for myself. To get a pay rise after being on the lowest pay rate possible (Pay Group 1) for six years, I took another direction in my military career and decided to train as an Administration and Pay Clerk."

In 1999 the now SGT Bishop, who had been on continuous fulltime reserve service at 22 Construction Regiment since the previous year, decided to join the regular Army.

"I was a sole parent at the time and had just purchased a new home and car. Life was good. My Chief Clerk threw some transfer papers on my desk and said, "You love the Army so much,

why don't you join the ARA". He was right – I did love the Army. After discussing with my parents and weighing up the issue of managing a child with no family support in any potential posting location – I again signed the dotted line and swore allegiance to my Queen and Country, this time as a SGT in the regular Army."

"Back then, there was no leniency for sole parents. Only five days carers leave was given. Meticulous planning was the key. You had to plan well ahead. At one unit in 2004, I had to report to the Armoury before 0630 hours to sign out my weapon. My daughter's day care did not open until 0630 so I had to pay someone to mind my daughter and drop her off to care. Inevitably and despite arriving 10 minutes early, no one was issued a weapon until after 0700."

"I am sure that the young officer who denied me 15 minutes grace, now has children of his own and would reconsider his decision.
Being a sole parent was challenging, but through careful planning and loving support of family and friends I was still able to realise my dreams. My daughter Taylor is now a mature, well-adjusted 27-year-old young lady with a kind and loving partner, who both now have a beautiful one year old daughter – my granddaughter."

In 1999 the Australian Army focused on East Timor requiring an increased need for both reserves and women. This was the initial catalyst that produced many much-needed soldiers for operations that continued into the first two decades of the 21st century.

In July 1999 Kym transferred to the Australian Regular Army and was posted to the 3rd Combat Engineer Regiment (3 CER) as the Orderly Room Sergeant within the Regimental Headquarters. In September 1999, she had the privilege to deploy with 3 CER to East Timor on Operation WARDEN, an experience that has enhanced her military career substantially.

"Being born in Townsville in 1964, I was looking forward immensely to this great opportunity. I was the token female. No one ever asked or questioned me about being a sole parent and if I was 'ready' to deploy on exercise – or as it turned out – operations."

"Frantic activity occurred when CROC 99 was turned off and OP WARDEN was activated. I was trying to find out information about what was going on – apparently it was assumed I wasn't going on OP WARDEN because I was a sole parent, however, originally was told I was going on CROC 99, and no one questioned my ability to deploy then……funny about that."

"If it wasn't for the CO, LTCOL Steve Day, the RSM, WO1 Kev Vann, and the RQ, WO1 Richard Vinen, I might have been left behind. I will forever remember the RSM calling me into his office and asking me, "are you Ready to Deploy in three days"? There is only one possible answer from a Sergeant to their RSM, "YES SIR" came the reply. "Then you are going" he said with that steely, yet reassuring, tone in his voice."

"We deployed for about 4 months. My daughter resided with my parents back in Melbourne. I am forever grateful for all the love and support my family has provided throughout my 40 years of service. They deserve a medal!"

In 2003 Kym was posted to 21st Construction Squadron (21 Const Sqn) as the Chief Clerk and during her tenure she deployed on the Army Aboriginal Community Assistance Program 2004 (AACAP-04) to Bamaga a small town about 40 kilometres from the northern tip of Cape York.

"The program provided housing, health services and a waste management facility for the local indigenous community. The local community were the perfect hosts spoiling us with feasts of turtle eggs, turtle, dugong and crayfish. Oh my god, I've never seen so many crays. I went fishing at night and the local women got me into basket weaving."

In 2005 Kym was posted to 35th Field Squadron in Townsville as the Chief Clerk. In July 2006, she reallocated to the Royal Australian Army Ordnance Corps, and was posted in 2007 to the 3rd Combat Service Support Battalion (3 CSSB) as the Chief Clerk. The move to Ordnance Corps enabled her to progress in her career, and at the same time providing a diverse selection of posting preferences.

In January 2008 Kym was promoted to Warrant Officer Class One (WO1) and posted to Headquarters 8th Brigade as the Warrant Officer Coordination. In this posting she was presented an Australia Day Award for her achievements. W01 Bishop was posted to Headquarters 17th Combat Services Support Brigade in 2011 and had the privilege to deploy to the United Kingdom on Ex SUMAN Warrior.

In 2013 Kym was posted to Headquarters 4th Brigade (HQ 4 BDE) as the Brigade Chief Clerk. This was the Brigade her grandfather served with at Gallipoli. Kym and her parents had the opportunity whilst Kym was posted to HQ 4 BDE, to travel to Gallipoli in 2015.



Kym Bishop at Gallipol

W01 Kym Bishop spent years in Canberra at Army Headquarters as the Data Quality Manager – Army within the Army People Capability Branch. During 2020 she was part of the DGAPC team in Bush Fire Assist 19/20. In 2018 Kym had the opportunity to deploy on OP ACCORDION.

"Over the years it has often been difficult to deploy as nearly every unit needs their people. In August 2018 I was extremely fortunate to deploy on Operation ACCORDION to Al Minhad Air Base (AMAB) Dubai (Camp Baird)."

"Our gateway to the Middle East, I was the tri-service Theatre Personnel Support Centre Manager. We looked after and tracked everyone in and out of the area of operations. For me, it was a real culmination of all the skills and training over my forty-year career. I have been blessed with both the people and opportunities that have come my way."

In January 2021, after a couple of attempts, Kym was finally commissioned to the rank of Major, and posted to the Army Personnel Support Unit as the Detachment Commander within the Transfer and Transition Detachment Victoria / Tasmania. This team provides support, co-ordination, and administrative oversight to personnel and their families, and command, through the transfer and transition process, and when wounded, injured or ill.

On 01 April 2021 Kym was awarded the Federation Star to the Defence Long Service Medal for over 40 years of dedicated and loyal service in the Australian Army. Kym was presented the Federation Star by the Commander 4th Brigade, Brigadier Matt Burr, on the 28th November 2021 – a fitting tribute to both Kym and her family's close history with the 4th Brigade.

"There are mistakes that I have made – but I have always reflected and acknowledged them – I have learnt to move on. I believe in being the best you can be – if you are not successful at something – try again! Be kind to yourself – self-care is important. I am grateful that the Army has brought out the best in me."

"I have observed many good leaders and had various Mentors – the one that stands out the most, is my father."

8247303/F357880 Major Kym Marie Bishop's honours and awards include:

- Australian Active Service Medal with clasp EAST TIMOR
- The International Forces East Timor Medal
- Australian Operational Service Medal - Greater Middle East Operations
- Defence Long Service Medal with Federation Star
- Australian Defence Medal
- Emergency Services Medal
- Australia Day Medallion

2000 – 2020 The New Millenium – New Directions

During this period the Regiment significantly expanded its role in providing military construction support and relief operations both globally and at home. The next two decades would see the Regiment regularly deployed on Bushfire Relief and Support Operations.

The Regiment has provided support to Australian particularly to Victorian communities on many occasions, as part of Defence Aid to the Civil Community (DACC). They have also provided support to bushfire relief and recovery operations on five occasions including 1983 (Framlingham), 2003, 2006, 2009 (known as Black Saturday) and most recently 2019/2020.

Both the 2009 and 2020 fires were formalised as OP BUSHFIRE ASSIST 2009 and OP BUSHFIRE ASSIST 2019/20 respectively.

Significant contributions were made to support operations conducted by the ADF in arguably, its busiest extended period of operations since Federation.

2000 Golden Anniversary (50th) Birthday Parade

On 20 August 2000 22nd Construction Regiment, and therefore 105th Construction Squadron, celebrated its 50th Birthday at a parade held at the Oakleigh Barracks.

Commanded by Lt Col Bruce McClure RFD, a pilot, champion pistol shooter and civil engineer, the Regiment celebrated this milestone well. A stunning parade was conducted with Brigadier R.A. (Bob) Slater AM, RFD as the Reviewing Officer, Brigadier D.I. (Doug) Tyers Commander Logistic Support Force as the Principal Official Guest, along with Ms Anna Burke MP, the Member for Chisholm.

Colonel Bruce Addis RFD, ED was a special guest having joined as a recruit in 1955 he rose to become the CO of 22 CR in 1968 and also served as Commander 6th Construction Group 1973-76 and later as Colonel Commandant Victoria 1982-86. In his speech he praised Colonel I.J. (Paddy) O'Donnell OBE, ED for his inspirational efforts in establishing the Regiment in 1950.

The regiment's newest recruit, Sapper Nguyen assisted the CO and Colonel Addis to "cut the cake". It was also notable that Colonel Geoff Hunt RFD, ED, a former CO and 6th Engineer Group Commander, was present along with Major Tom Glazebrook AM, ED, a veteran of the first camp in 1950, and Major Bruce Campbell RFD, ED Officer Commanding 105th Construction Squadron for 12 years.

In his speech, Brigadier Slater made the pivotal point that.

"During WW2, when Australia's sovereignty was under real threat for the first time, the logistics of supporting troops in the north by industry and supply organisations in the south was largely dependent upon engineer factors: keeping roads open under all conditions; bridges; power generation; water supply; construction of staging camps etcetera.

With these tasks went associated support tasks such as quarrying, provision of timber, well drilling and so on. Army Engineer units called "Army Troops" were formed from enlistees who had appropriate engineering experience but were ineligible for active service due to age (either too young or too old) or medical condition. They kept the lines of communication open: however, the task was huge and not all priorities could be met. As always, there was never enough engineers!"

Brigadier Slater further expanded that;

"After the war, Sir Clive Steele, Army Engineer in Chief, realised that a small permanent army could never maintain all these engineering skills in such numbers to respond quickly to what in the future might be a much more sudden and concentrated threat."

From this; the Supplementary Reserve was born, Headquarters 22nd Engineer Regiment, 105th Construction Squadron and 203rd Works Section are the epitome of that vision.



On parade, Golden Anniversary 2000



Col B. Addis RFD ED former CO, LtCol B. McClure RFD present CO and Spr Nguyen

CHAPTER SIX

Let's Get Serious!

2001 Deployment - Timor-Leste

As regular RAE units and personnel rotated through the extensive Sapper commitment to operations in Timor-Leste, many Reservists were needed to bolster and backfill the multitude of sapper tasks back at home and abroad. Positions back home were being filled by Reserve soldiers on full time service (FTS). The Reserve Sappers had really now come of age - filling important roles in the support of our national interests. Captain Noel Tipton explains:

"At this time, I was posted to the Resources Officer position within the SHQ of 105 CS. CAPT Matt Sanderson had been posted in as the ARA 2IC along with WO2 Bill Oates as the OPS WO. Matt had been there since 2000 and I think Bill had been there from about the same time also.

105 CS had both these positions for ARA members on the unit establishment, and the ARA CAPT position is still there today. 105 CS has not had an ARA 2IC posted into and working as 2IC 105 CS since Matt Sanderson left after he returned from East Timor.

Matt had been trying desperately to get a job as a UN Observer in East Timor and was given permission to deploy as long as he had a backfill plan for his role at 105 CS. He approached me and I agreed to fill in for him for six months. I consequently was signed up for five months continuous full-time service (CFTS) (15 Jan to 15 Jun) and any additional time needed on Reserve Days. As the 2IC of 105 CS I was working under MAJ Brent Rodgers, with WO2 Bill Oates as my right-hand man in the operations (OPS) role.

At this time the Regiment was still under command of Headquarters Logistics Support Force and remained so until 01 Jul 2002, at which time 22 CR came under command of Land Command Engineers."

LtCol Bill Van Ree (ex-Army Apprentice & OCS Portsea Graduate who had extensive overseas experience with UN demining and Security Operations) took over from Lt Col Bruce McClure RFD (a highly experienced Civil Engineer with the CRB and private industry) as CO 22 CR at the start of 2001.

Capt Tipton goes on to explain the deployment from a Sappers point of view:

"In early December of 2000 a number of soldiers from 22 CR, including several members of 105 CS deployed to East Timor as part of operation TANAGER. They completed two weeks pre-deployment training in Townsville and then arrived in country on 14 Dec 2000.

They remained there until 19 Jun 2001. The soldiers included Keiron Hooley, Gary Hedt, Dave Harvey, Mark Helmuth, Leonard Campbell, Tony Longley, Peter Harris and Andrew Ashton. They all competed the re construction of a local school in their own time which was subsequently opened by the Commander, Lt Gen Peter Cosgrove (later, His excellency General Sir Peter Cosgrove, Governor General of Australia)

Sapper Kieron Hooley, a fitter and turner, informed me that the sea was so rough going over that even the Navy pers were seasick and the toilets got blocked because of the numbers using them!"



Captain Noel Tipton's Ute at the Forward Operations Base (FOB) in Dili.

2002 Mount Hotham & City of Monash Parade

After the training year commenced and planning was completed work started in earnest.

April saw the completion of the refurbishment of Blow Hard Hut, Mt Hotham over an eleven-day construction period. The work was completed under a DAAC 5 category task as the hut was used as an emergency shelter over the winter months.



The task was planned and supervised by 105 CS with CAPT Noel Tipton appointed as the detachment commander. He recalls:

"CPL Chris Gray (who would soon deploy to Iraq) and LCPL Adam Bourke were the site carpenters. SPR Mick Murray attended (he was a "Queens Counsel" in civilian life) and later that year in July left the Army after 20 years of service. Also, SPR Scott (Dog) Amery an ex ARA Plumber (41st intake apprentice) was on site.

Scott went on to become an RAE officer and was eventually posted back to 22CR. He served in 105 CS and ended up as a Maj in the training cell at RHQ. Other members I recall, were SPR Joe Pepe and SPR White.

The team stayed at the Vicroads work site just up the road and enjoyed many a quiet night out of the public gaze.

105 CS had a Training Troop at this stage and along with Resources Troop did adventurous training at both the Grampians and Wilson's Promontory.

As I recall, and according to the Sapper Magazine, we also scoped up a non-equipment bridge (NEB) task for Parks Victoria at Colac in the Otway Ranges, which I'm pretty sure was eventually constructed, I know we did the design, not sure if we built it. I do recall doing the initial RECON and feasibility study. Training Troop constructed the BBQ tables that are at the Engineer Compound and SPR Mick Murray was farewelled at the Mill Site (as it was known then) using these tables. SSGT John Morey was Micks best mate (a Vietnam veteran) and he was also a stalwart of 105 CS."



22 CR exercised their right to march through the City of Monash with bayonets fixed and swords drawn.


CITY OF MONASH

22nd Construction Regiment

GREETINGS

By these presents

Freedom of Entry to the City of Monash

City of Monash Freedom of City march

2003 Eastern Victorian alpine bushfires - Myrtleford

In 2003 preparations were underway at the Newborough Depot to commence *"Exercise Kickstart",* which was the first training exercise for the year focusing on all the standard compliance and governance requirements needed for the Regiment.

Within 48 hours, the unit received a warning order (WNGO) to be prepared to assist the state government with ADF bushfire support in Myrtleford as part of the Eastern Victorian alpine bushfires. A team of 100 members from both 22 Construction Regiment and 4 Combat Engineer Regiment deployed to Myrtleford. Captain Noel Tipton explains:

"The CO at the time, LTCOL Bill Van Ree, asked me if I would command the first bushfire response rotation at Myrtleford. I agreed. The first rotation commenced with 22 Const Regt in command, the second rotation was commanded by 4 CER and the third by 2 CER. 105 Const Sqn provided most of the members over the entire three-week period that this critical support was needed."



Mt Hotham Airbase during the 2003 Bushfires

The Eastern Victorian alpine bushfires were a series of bushfires in 2003 that burnt in the Alpine National Park and Mount Buffalo National Park in north-eastern Victoria. The bushfire was triggered with eighty-seven fires that were started by lightning on 8 January 2003. Eight of these fires were unable to be contained and joined to form the largest fire in Victoria since the 1939 *"Black Friday"* bushfires.

The main fire burnt over 1,300,000 hectares over 59 days before it was contained on 7 March 2003. 41 homes and 213 other structures were destroyed. In total around 15,725 people were involved in the fire effort, including 160 ADF members at the peak of the fires in February.

Concurrently, on 8 January 2003, the ACT experienced the most destructive bushfires in its history. Four people died, hundreds were injured and 510 properties destroyed.

The Eastern Victorian alpine bushfires were essentially the first time the Regiment had been formally tasked to use its inherent skills and capability with bushfire assistance. Previously it had constructed a replacement bridge (Bailey bridge) at Framlingham in western Victoria during the *"Ash Wednesday"* fires in 1983.

Within two weeks of the completion of the bushfire support 105 CS commenced their first Annual Field Exercise (AFX) for several years.

Key appointments at the time were CO, LTCOL Bill Van Ree, RSM, WO1 Gordon Templeton, MAJ Mark Roberts (OC 105 Const Sqn), Captain Noel Tipton (2IC 105 Const Sqn) and WO1 Jim Davis (SSM 105 Const Sqn).

The SSM at the time, WO1 Jim Davis, remembers some of the members of particularly 105 Const Sqn at the time, they included,

"*LT Johns (PLT TP), LT Chung (who turned 23 on 15 Feb at site 6) and LT Allison Gillam. Other members of the Squadron at the time were; WO2 Dave Stevenson (SQMS), SSGT Bob Brasher, SGT Andrew Gill (TPT SGT), CPL Richy Cunningham (SNR CE), CPL Jim Colbert, CPL Dall, CPL Jolly, CPL Howe, CPL Matt Giersch, CPL Breed, SPR Crase later CPL Crase, CPL Gordon Lark, LCPL Brett Waterford, LCPL Adam Burke, SPR Rees, SPR Fossett, SPR Noble, SPR Johnson, SPR Butler, SPR Falzon, SPR Coleman, SPR Dupont, SPR Eddy, SPR Gavin, SPR Dave Szalay, SPR Tom Morley, REC Bouma and REC Cameron".*





Mill Site at Puckapunyal

Jim goes on to explain, "*Tasks included the refurbishment of the "Camel Club" (26 TPT SQN Soldiers Canteen) in Puckapunyal, the Road to the old 91st Forestry Squadron 'Mill Site" (now known as the Engineer Compound), repairs to the Crusher retaining wall at the quarry, a general Puckapunyal Quarry refurbishment and clean-up, Driver training, WTTS shoot and a live fire Demolition practice on the range.*

Highlights included, SPR Dave Szalay digging up a Telstra cable, LCPL Brett Waterford (the transport CPL) towing a trailer with the brakes applied from the Engineer compound to site 6, SPR Butler digging up a UXO and attempting to hand it to CAPT Gerry Betts and the memorable soccer match on 16 Feb between unit members.

Soldier skills were never forgotten. Army Individual Readiness Requirements (AIRN) continued to be paramount to the Regiment so that individuals could retain their compliance, and therefore, ability to deploy."



Shooting was organised with a visit to the WTSS and the opportunity to attend a live firing demonstration conducted by the School of Armour. The demonstration included tanks (Leopard MBT), artillery and RAAF F-111s destroying the enemy utilising amazing aerial manoeuvre coupled with potent weapon systems.



Leopard Tank

General Dynamics F111



2003 AACAP – Palm Island



Palm Island Jetty

After the bushfires and Annual Field Exercise (AFX) in 2003, the focus for the Regiment turned to the Aboriginal and Torres Strait Island Community (ATSIC) Army Community Assistance Program (AACAP) 2003.

As part of its new role to round out the Regular Army Construction Squadrons, 22 CR was tasked to complete the construction of a three-bedroom house for AACAP 2003. The task was staged to allow two rotations of four weeks each, comprising two teams of around 30 pers. The Construction agency taking the lead on the project was 17 Construction Squadron and the 22 CR pers would be under command 17 CONST SQN.

105 CS provided a significant contribution to this task. The CO 22 CR, LTCOL Van Ree, appointed CAPT Tipton as the detachment commander and charged him with the responsibility of putting together a team with the required skills to get the job done. Soldiers from across 22 CR were approached including many from 105 CS who indicated their willingness to help out. CAPT Tipton completed a RECON in April of 2003 to confirm the scope of works and the first rotation deployed on 7 Jul 2003.

It's worth noting from 1996 the program was initially known as ATSIC Army Community Assistance Program, however, was later changed to the Army Aboriginal Community Assistance Programme (AACAP).

Captain Tipton summarises,

"The location for AACAP 2003 was Palm Island, off the coast of Townsville. Swaying palm trees and pure white beaches were helpful for the maintenance of morale and the Bear Cave located just above the high-water mark in Little Butler Bay (where the team were accommodated) was a pleasant spot to spend an evening after work.

The deployment to Palm Island was via caribou aircraft and LCM 8 barge. CPL Chris Gray a recently transferred carpenter from 1 CER was to be the site supervisor and just prior to departure from Townsville was asked if he would be available to deploy to Iraq. He immediately said yes and after I advised him to first ring his wife and obtain permission (which he received) departed back to Melbourne to prepare for deployment.

Newly promoted LCPL Bourke was appointed the new site supervisor and did an outstanding job running the site for the first rotation. WO2 Dave Stevenson (SQMS) also a qualified electrician was great support to the other site electricians.

As well as completing the three-bedroom house assigned another house was completed to frame up stage giving 17 CS a real boost to their scope of works.

The Wallaby Point road was also part of the scope and problems were encountered during the construction due to large rock deposits along the alignment. CPL "Jacko" Jackson and Fiona Ince (later WO1 and RSM) were enlisted to bring the air track that 22 CR owned across to Palm Island via the barge to allow drilling of the rock and removal via explosives".



Mess tent and Great Palm Island Café at lunchtime

Within the Army's deployable design and project management capability (primarily 19 CE Works) the ability to deliver various projects under AACAP and Defence Cooperation Projects (DCP) is becoming increasingly important for the nation. The ability to plan, design, control and coordinate infrastructure engineering projects in designated areas, can often be found with the increasing utilisation of part-time elements.



Many individuals and teams can often provide the skills needed to deliver these projects.

By the start of the of the 21st Century, traditional government departments generally no longer trained apprentices. Most tradespeople were trained and employed within the civilian workforce. Tradespeople were difficult to enlist into the military. Generally, the ADF could not compete with the pay and conditions offered in civilian employment. The idea had been sown to produce an Army Reserve Tradesperson.

In 2002/03 LTCOL Bill Van Ree tasked CAPT Noel Tipton to trial a Reserve Apprenticeship Scheme to enable the Regiment to fill trade positions. The outline plan of the scheme was to spend 2 years in partnership with the Gippsland Group Training and Apprentice Victoria in the trade of Carpenter undertaking both trade training and the various commitments required for the Army Reserve.

The scheme required participants to commit to both trade training and a minimum number of days to the Army Reserve. It would become known as the Army Reserve Training Apprentice Program (ARTAP). Captain Noel Tipton liked the idea.

Captain Noel Tipton acted as the Apprentice Master, a role he had performed in the ARA as the Apprentice Master for Apprentice Squadron at the School of Military Engineering at Casula in Sydney. There, he monitored the technical and military training of third- and fourth-year building trades apprentices to both civilian and military detachments primarily in the Sydney metropolitan are but also Australia wide.

Later, WO1 Jim Davis would become involved in 2006/7/8 with SGT Tony Smith as the TP SGT, CPL Vic Morrow as TP CPL and Major Graeme Lambert as OC. Sadly, the scheme ultimately folded when it was realised that Reserve Service needed to be voluntary and therefore, the ADF could not enforce requirements for participants to parade for Reserve service.

2004

Lieutenant Colonel Steve Bell assumed command in 2004. Major Mark Roberts continued as OC 105 Construction Squadron with WO1 Jim Davis as SSM.

The RAE Corps Newsletter *Sapper Summit* (number 47) again highlighted the important activities and events conducted by the corps in Victoria throughout 2004. It also highlighted the ever-increasing and demanding RAE global commitments.

In his annual Waterloo Dinner Head of Corps summary, Brigadier Bill Sowry, spoke of the wide array of deployed sappers to Iraq, Eritrea, East Timor, Solomon Islands, Afghanistan and Papua New Guinea along with numerous other locations around the globe and at home. He highlighted the traits evident from when Stan Watson first built his pier at ANZAC Cove and all of us continue to see wherever sappers are deployed.

These recurring themes of readiness, adaptability, innovation, ingenuity, hard work, hard play, excellence, professionalism, courage, teamwork, mateship and good humour have characterised our corps since inception and clearly form the basis of our engineer ethos today.

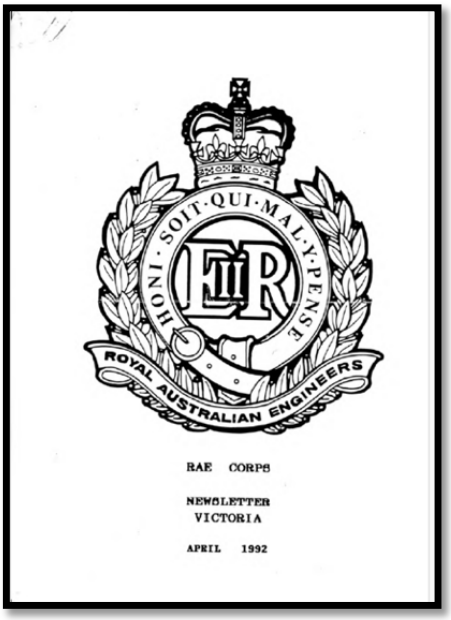
Established in 1992, the RAE Historical & Heritage Committee was finally incorporated in 2004 to provide support to the RAE Corps Committee – Southern Region.

Primarily their role is to conduct excursions, collect historical artifacts and data as well as publishing the bi-annual *Sapper Summit.*

Originally in a newsletter style format, with limited images, *Sapper Summit* was published 4 times annually and provided a great medium to keep Victorian Sappers abreast of current activities, deployments and developments.

It has evolved considerably over the years and has also become a wonderful source as a primary historical record.

Now in a magazine format it is published biannually.





First Sapper Summit-1992.



Latest Edition

In 2004, the Regiment conducted a series of engineer and soldier familiarisation and readiness training throughout the year including, demolitions, live firing, mobile dimensional saw, IMT and AFV training with 4/19th PWLH regiment.

As OC 105 Construction Sqn, MAJ Mark Roberts was actively involved with numerous construction tasks throughout the Puckapunyal area including the School of Artillery and the Army Logistic Training Centre. A wide variety of trade and sapper skills were enhanced.

39 Construction Sqn, based at Newborough, had an exciting training program constructing Non equipment bridging (NEB) at Dutson Range near Sale in July then conducting a reserve demolition of the structure in August. Across the 4th Brigade, preparations were underway to deploy a company to Rifle Company Butterworth (RCB) in Malaya.

The regimental training that year culminated with a 9-day exercise held at both Puckapunyal and Oakleigh during November. Earlier in the year, CO 22 Construction Regiment, LTCOL Stephen Bell, introduced the principal guests and speakers at the Sir Clive Steele Lecture conducted at Oakleigh Barracks on Saturday 17 July 2004.

This coincided with a unit open day featuring static displays from SME, DRSC and Johnny Appleseed GPS. One of the principal guests included Mr David Steele, a descendant of Sir Clive Steele. The theme for the lecture was military surveying.

MAJ Terry Lord had enlisted in the ARA in 1978 into the Royal Australian Survey Corps. Most recently he had served for the United Nations conducting survey operations in Eritrea and Ethiopia and spoke in detail of the challenges he faced.

Colonel D.G. (Don) Swiney MBE, a Sabah and Vietnam veteran, who had served in 6 Construction Group in the mid-1960s as a training officer, completed his service as the Director of Survey – Army and gave a wonderful lecture on the history of surveying in the ADF.

Each year skiers from the Army, Navy and Air Force, the United Kingdom and Victoria Police congregate at the Whiskey Flat Rifle Range in the Victorian high country to contest the Australian Defence Interservice Cross-Country and Biathlon Championships. Ten sappers from the Regiment deployed in April to conduct an upgrade of the facility.



MAJ Filip F Likar, the operations officer for 22 Construction Regiment, led the upgrade of the Whisky Flat Rifle Range (WFRR) to a fully functioning small-bore biathlon range. Major Bruce Andrew Reeves, the ARA Major at 6 Engr Group HQ in the late eighties, was awarded the Conspicuous Service Medal in the Queen's Birthday Honours for his outstanding service as the second in command of the Incident Response Regiment

2005 Exercise "Van Diemen's Assist" Buckland

In 2005, 105 Construction Squadron deployed to Tasmania as part of 22nd Construction Regiment Annual Field Exercise (AFX) where the two Squadrons (105 and 38) were split to undertake two separate activities – Buckland Military Training area and Stoney Head were the locations with manpower and expertise of the squadron's adjusted accordingly. Jim Davis, the SSM 105 CS, highlights that a mix of both squadron's personnel were located at both sites. Although, Stoney Head was principally comprised of 38 Field Squadron members and plant operators. Whilst 105 CS were predominately at Buckland.
Jim goes on to give a succinct summary of one of the Squadron's most memorable exercises:
The Command Structure of the HQ of 22 Construction Regiment was;

CO	LTCOL Steve Bell
XO	MAJ Cliff Parfitt (VICROADS Bitumen Road Specialist)
OPSO	MAJ Shawn Higgbed (ARA and recently returned from deployment)
	CAPT Chris Reeves
	MAJ Terry Purrdin (RASigs Officer)
Medic	CPL Leigh Kelly
RSM	WO1 Pat Jorna
RQ	WO1 Noel Schwartz (ARA)

The command team at 105 Construction Sqn consisted of:

OC MAJ Mark Roberts
ADJT CAPT Sarah Reynolds (ARA – Survey Corps)
SSM WO1 Jim Davis

Troop Staff:
LT Hayden Barlow
LT Dale Hopcraft (Stoney Head)
LT Scott D'Rozario
LT Sally Chung

203 Works Section was staffed by:
CAPT Noel Tipton, and
WO1 Gary Lewis (Stoney Head)

"We had an attachment of a Scientist from DSTO South Australia who was doing a study into time and motion associated with patrolling and other tasks (the CO was big into this type of analysis) we also had members of 1 PET COY located with us at Buckland.

The Regiment took on an extremely ambitious decision to conduct its 2005 AFX "overseas": in Tasmania. This decision required a huge amount of planning as the main tasks to be undertaken meant the transport of not only the sappers and basic equipment but also plant and heavy vehicles via sea to Tassie.

The overall objective was to split the Regiment into two components – 105 and support elements would be located at Buckland which was located approximately 100 kms North East of Hobart (about 1.5 hrs by road), whilst 38 Squadron would be at Stony Head which was some 260 kms away from Hobart and located on the North East tip of Tassie.
The logistical problems in moving such a large element along with heavy equipment from Melbourne to Tasmania were many but we were lucky to have a very professional and experienced RQ in WO1 Noel Schwartz and the OPS Cell who managed to bring everything together.

The Wednesday night prior to departure for Tasmania was a chaotic one at the Oakleigh Depot with people running around everywhere loading gear onto trucks and trying to get everything done – personal gear was a priority with bags being stamped with the deployment badge. The travel to Tasmania for most of the Regiment was by sea, including vehicles, plant and equipment. Some of the Command Group flew down to Hobart and were then bused from Hobart to Buckland – I was part of the Command Group"

BUCKLAND TRAINING CENTRE TASKS

WO1 Jim Davis explains the tasks at Buckland,

"The tasks at Buckland were the installation of a triple barrel spillway, culvert, and drainage clearance past the spillway. Also, Installation of running boards to one of the bridges on another internal road to the eastern boundary access gate.

We also constructed a load ramp at the scale "A" accommodation camp on the eastern side of the parade ground or vehicle park.

The spillway was no easy task and complicated as it involved the diversion of the existing stream and a lot of work to prepare the site. As you could imagine the water was very cold and running at a fair rate. In addition, the task involved a huge amount of concrete being used for the spillway and this had to be trucked from Hobart which was a couple of hours away. Access for the heavy vehicles was also difficult."







STONY HEAD TASKS

Meanwhile the Stony Head tasks were mostly horizontal explains WO1 Jim Davis,

"*The tasks at Stony Head were the installation of two cattle grids, upgrade work on the western access track to the beach and the eastern track to the fire lookout point and beach. To complicate the tasks of the culverts the area at Stony Head; the condition under foot was extremely wet causing many headaches to the Construction Foreman (SGT Wayne Scanlan).*

The main component at Stony Head were either planties or truckies – there was a lot of plant work required, and this was overseen by WO1 Gary Lewis (ex ARA Plant) who did manage to get very frustrated with some of the things that happened there. The planties were Reservists who only did this part time and Gary expected more of them. Also assisting Wayne Scanlan was the outstanding SSGT Bob Brasher.



As one of the memorable exercises of the period, WO1 Jim Davis explores the many aspects of the Annual Field Exercise in Tasmania.

"LT Dale Hopcraft was the Officer running the site. (LT Hopcraft was a psychologist by profession and he would have needed all these skills at Stony Head). He later joined the ARA and is still serving. Adrian Longmuir was the cook at Stony Head and did a great job feeding the troops and running the kitchen. Adrian went on to join the ARA and Commissioned where he was allocated to the MP's. How I envied the Stony Head people being away from RHQ and all the tactical and administrative stuff that was being pushed down to the Sqn. They seem so much more relaxed and I would not doubt – enjoyed a couple of beers too. I visited the Stony Head Camp with the RSM (Pat Jorna) – believe me it was a long drive from Buckland to Stony Head, but it was certainly worth the effort of visiting."



Cattle grid completed

"I thought that this exercise was going to be a breeze but after a few days the tactical scenario started to ramp up where we were required to always carry weapons, patrols were stepped up not only for protection but also to assist the DSTO Scientists with their study.

We started to harden our defences with gun picquets, roving patrols and then the installation of lighting and 24-hour vehicle checkpoints. The patrols in this terrain and vegetation was demanding particularly as the sappers had also been putting in long and hard days at the work sites so you can understand why they were not well received.

MAJ Higgbad was without doubt in his element here – acting as the enemy he would probe and fire a few shots, usually when we had just got to bed, putting us all on stand to and then disappear – there was no enemy party as such only the good Major. I know we were supposed

to deal with things like this, but the boys were a bit ragged and found that war games were not really to their liking – sleep was a bit precious."

"I know that on a personal basis I found it very demanding and it really tested me out – not only in endurance but also on a tactical basis. I often sought the guidance of Scott D'Rozario on the improvement of our defences.

Buckland was in an area that received a lot of rainfall with the vegetation being mainly low growing stubble type with ferns and large trees.

Because it was a damp environment there were these little black leeches that lived in the ferns and low scrub etc. and when you brushed past them they (the leeches) managed to attach themselves to whoever brushed past them – how they managed to get in under our uniforms I just do not know but you would get back to camp and then be picking these little devils off your body – the concern was if the leeches managed to get into your eyes or ears.

I remember the senior DSTO Scientist was a lady and she managed to pick one of these leeches up and had to be taken to hospital to have it removed from her ear and was certainly in a lot of distress.

The accommodation at both sites was graded as "Class A" and it was particularly good – I can say that at Buckland we had a wonderful kitchen, sleeping accommodation and ablutions. The sleeping areas were large open huts sleeping maybe 30 people where you set your stretcher up and enjoyed the company – it got a bit noisy at times with people coming and going.

Let me just expand a little bit on the DSTO Scientists – this was not the 1st time they had travelled from Adelaide to be part of 22nd Construction Regiment activities – the CO (LTCOL Steve Bell) was a real numbers man particularly with time and motion and was keen to see the scientific evaluation of how the military operated with "inputs/outputs". The CO was a very astute leader in this way and maybe a bit before his time but I must admit I am not sure what the results revealed in their study.

The Scientists would travel out with the patrols and evaluate how they could use their time and effort better. In support the Scientists did have military personnel with them who gave the Scientists advice and guidance – they lived away from the main camp.

We were really looked after here with SGT Malcolm Phelps and CPL Steve Arbuckle who also had civilian helpers – no one could complain about the meals – ample good quality food. The OC, Mark Roberts, an ex- ARA Officer, was extremely easy to work with and certainly enjoyed his time as OC. He was a wealth of knowledge and could be approached on anything – a very calm person but boy didn't he snore! I made sure I was down the other end of the hut from where Mark was sleeping.

The 2IC of 105 Construction Squadron was CAPT Sarah Reynolds, also ARA. Sarah was a Survey Corps Officer – she was wonderful to work for and an extremely efficient and knowledgeable Officer. This came to the fore in the way she ran the OPS Cell for the Sqn very skilled analytically but quiet and methodical – you could feel that you could be her friend but at the same time if

you overstepped the mark, she would certainly let you know. LT's Barlow, Chung and D'Rozario (there were other Officers too)"

"Hayden Barlow and Scott D'Rozario both provided excellent skills to the activity and as I mentioned I often relied on Scott for tactical advice – Sally Chung was used in the OPS Cell but was still learning the ropes in relation to the military – Sally was from South Korea and no doubt a very smart lady but as I said relatively new to the military – a very easy-going lady who went out of her way to help and mixed in well with the soldiers.

I think that as LT Chung was a little inexperienced in the military ways that the soldiers played on this and took advantage of her – I remember towards the end of the activity when things were winding down that a group of people conducted a mock parade and made a presentation to Sally – the leaders in this were Mick Schiavoni and Kieron Hooley.

It was decided that we should have a formal dedication of the culvert and this was arranged with Sarah Reynolds completing the task of the dedication – it was a task that everyone could be proud of.

The plan was for most of us to be taken by bus from Buckland to Kokoda Barracks in Devonport (160 Transport Troop – I think) where the vehicles would be refurbished, washed and cleaned ready for the ferry trip back to Melbourne.

It was a jolly day and we were on the bus heading North. The driver, for some reason, decided that he would go the short way along back roads and the like. We were well into the journey when we could smell smoke or burning and advised the driver. Yes, we had trouble with the rear axle and here we were stuck on this dirt track in the middle of nowhere on the crest of a hill with the wind blowing a gale and a very cold breeze onto us – why did this happen??? We were stuck there many hours and were convinced we would not make it and would certainly miss the boat trip home.

The driver was near useless with the result that most of the work was done by our people. It all ended up OK and we did manage to get to Devonport. That is where the fun started, as the vehicles had to be spotless.

We were given local leave in Devonport which enabled us all to have a look around – must admit that I don't remember much about Devonport.

There were a few minor accidents which caused damage to some vehicles but nothing too serious. For instance, the low loader had some problems with bridges and tight turns when coming to the training area. In addition, I understand that a veranda in a nearby town may have sustained some damage when the driver forgot the height of his load.

At Buckland we had clear days with very cold nights and mornings – I think we had some minor rain but nothing too much – the Gods were good to us but I can tell you those little black leeches were still there waiting to jump onto you.

Whilst we were in Devonport the CO (LTCOL Bell) arranged a parade and presented two (2) Soldiers Medallions to LCPL Phil Rees and SPR Vinni Mangion.

Our trip back to Melbourne was on board the Spirit – now the drivers were allocated to cabins but the rest of us were allocated to deck chairs – in addition we were allowed to have a drink and I must admit some did go silly and got stuck into the alcohol – one certain person from the Valley caused a lot of ruckuses when told that the bar was closing – we should have thrown him overboard. Rather than sleep upright most of us found various places to lay our heads down but it was still a long and uncomfortable trip and awfully hard to get any sleep.

After we had arrived on board the CO decided that it would be good to have a sit-down dinner for the key players which was very nice but the meal was certainly overpriced. When we arrived back at Oakleigh, I can tell you that it did not take long for everyone to get their gear together and get out of the place.

In summary no matter your role, rank, location or trade this was one of the better Exercises that the Squadron (and Regiment) had been involved in and everyone who participated came away with the feeling of a job well done. The best part was that everybody could see the commencement and completion of the various tasks that were undertaken. We were not leaving jobs half completed".

2006 Donovan Joynt VC Sportsman's Club (Puckapunyal)

Jim Davis distinctly remembers a significant project from this time.

"The Donovan Joynt VC Sportsman's Club is a unique building of hexagonal design which was originally built as the club house (by 21 Construction Squadron I think) for the Golf Course at Puckapunyal, later it was used as a restaurant but after being left vacant and abandoned for many it fell into disrepair with the result it was attacked by the white cockatoos who nearly demolished it by eating the woodwork.

The CO of the Regiment (LTCOL Steve Bell) accepted the task of refurbishing the building but due to manning issues and other priorities of the Regiment the project sat idle for several years and to be truthful was an embarrassment to the Regiment as there was a big sign outside the building saying "22 Construction Regiment is refurbishing the Donovan Joynt, VC Sportsman's Club" and anyone driving around the area would be aware of the Regiment's involvement (or lack thereof).

Now the task was a monumental one because it really involved a total rebuild of the property including replacement of the plaster on the walls, windows, outside staircase, floor, support beams, plumbing including kitchen sinks and toilets and much more.

LTCOL Raike took a decision to get this protracted project off our books and during 2005-2006 sent teams of people up to work on the building. From memory some of the tradies involved included CPL Chris Grey, John Farren-Price, Laurie Crase and Alister Rose along with many sapper workers. A concentrated effort was made with the result that the building was handed over to Michael Pollack (Base Manager PMA) on 15th October 2006 and was finally off our books." 2006 had already been a full year of training and other commitments before the onset of the bushfire response.



Handover of the Donovan Joynt 15 October 2006
Mick Pollock (Base Manager Puckapunyal),
Laurie Crase, Alister Rose and
COL. Mike Kavanagh (Land
Commander Engineers)



COL Mike Kavanagh, Commander
Land Command Engineers (CLCE)
LTCOL John Raike and
Michael Pollock

2006 Bushfire Support - Erica

Lieutenant Colonel John Raike ADC assumed command of 22nd Construction Regiment in 2006 along with Warrant Officer Class One Jim Davis as the Regimental Sergeant Major. During this period the Regiment produced an excellent regimental journal *"The Castle"* that chronicled the activities of the unit.

The unit had experienced substantial changes to its external command structure combined with a Unit Establishment Review in 2006 and other changes that were unexpected such as those that emanated from *Project Focus*. This project resulted in the consolidation of most of the operations support personnel (RAEME, RAAOC, RAAPC, AACC) to the 4 Brigade Operations Support Company (BOSC), where they continued to provide support to the

Regiment as well as other Units of 4 Bde. In his Commanding Officers message, Lieutenant Colonel Raike writes,

"Since 1950 we have almost continuously worked under an engineer formation HQ. We were briefly a direct command unit of HQ LSF (now 17 CSS Bde) from the late 1990s until 2002. Following the disestablishment of Land Command Engineer in October 2006 we have been an integral part of the 4th Brigade in the 2nd Division".

Throughout its journey, the Regiment has been under command of various Headquarters, initially administered by the Chief Engineer's Branch, Southern Command until the formation of Headquarters 6th Engineer Group at Swan Street in 1953. This headquarters was variously titled HQ 6th Engineer Group (1953 – 1960 and 1983 – 1992) and HQ 6th Construction Group (1960 – 1983) playing a significant role commanding the unique Supplementary Reserve assets in Victoria.

In 1992, HQ 6th Engineer Group was disbanded, and HQ Logistic Support Force Engineers was raised, commanded by Colonel R.A. Slater, the previous commander of HQ 6th Engineer Group. In 1993, Colonel H.R. (Howard) Ellis RFD succeeded Colonel Slater as COMD LSF ENGRS.

In 1997, 22nd Construction Regiment became part of the Logistic Support Force under command of HQ LSF. HQ LSF Engineers was disbanded, and there ceased to be an Ares RAE Colonel appointment in Victoria. In 2002, the Centenary Year for the Royal Australian Engineers, 22nd Construction Regiment once again was brought under command of an RAE HQ, this time HQ CLCE (Commander, Land Command Engineers). The CLCE at the time was Colonel Rod West CSC along with the Corps RSM, WO1 Fred Airs CSM.

Since October 2006 the unit has been under command of 4th Brigade in the 2nd Division.

The essence of the unit's work however, remained unchanged. The skills brought to the ADF again proved vital in protecting the nation's interests when, at short notice, the unit was tasked to stand up the 4th Brigade Engineer Support Group (ESG) in late 2006 in response to the disastrous bushfires in Gippsland.

With this devastating news, Captain Noel Tipton recalls,

"As the unit was preparing to stand down for the year the call came once again to support the state government with bushfire relief. This time the location was Erica and the usual suspects from 105 CS volunteered again. I had Xmas at home and deployed late in December".

Within a period of 3 weeks the unit was responsible for commanding troops from 4CER, 8CER (NSW), 13 Field Sqn (WA), and 4 CSSB as well as being ably supported by 1 Petroleum Coy and 3 Recovery Coy from 9 FSB. The ESG developed 47 km of containment line around Melbourne's main water supply, the Thompson Dam, predominately using plant to clear trees as directed by the civilian authorities. The unit also provided community asset protection to five townships in the Erica area of operations (AO). The Commanding Officer, Lieutenant Colonel John Raike remembers,

"It was surreal to see snow fall on Christmas day while on the other ridges the fire was still blazing. The fire situation was substantially controlled just before the start of 2007 when we were released from the AO. In the past command of such a group has rotated through other Units as well, but our then Brigade Commander, BRIG Aird, demonstrated such confidence in our ability to manage the task that he kept the Regiment as the on-line response force for the remainder of the bushfire season. We were stood down on 31 March 2007. Brigadier Aird again placed the Regiment on standby for a similar response over the 2007-2008 bushfire season, fortunately the fire season was not as severe, and we were not called out".

Major Ian Toohill reported in "*The Castle"*,

"The fires started by lightning strikes in the Victorian Alpine region in early December 2006 and continued to burn in East Gippsland throughout January. Whilst the firefighting effort was very much a Country Fire Authority (CFA) and Department of Sustainability and Environment (DSE) responsibility, the Army Reserve provided specialist assistance primarily with heavy bulldozers and its refuelling capacity.



The superb efforts of 4 Bde Reservists were in part responsible for the securing of the Thompsons Dam's water quality. Between 12th and 29th of December 2006 Army Reserve Engineers from 22 Construction Regiment cut a 47-kilometre section of fire containment line designed as an approximately 25-metre-wide fire break to protect the Thompson catchment area from pollution by fire debris. The Thompson Dam provides 40% of Melbourne's water and is critical in times of drought.

Once the Victorian Government made a formal request of Defence for assistance, a Defence Aid to the Civil Community (DACC) task group was raised by the 4th Brigade at very short notice. There were plenty of volunteers. The group initially consisted of 22 personnel drawn from 22 Construction Regiment, 4 Combat Engineer Regiment, I Petroleum Company and 3 Recovery Company. The number swelled to 40 during rotation with each member being on task for approximately one and a half weeks.

Overall, the Army provided 9 bulldozers, 5 Caterpillars, 2 John Deere and 2 Komatsu 155's which were the heaviest in location. Refuelling tankers and recovery vehicles were also supplied.

Two 8-hour shifts operated daily with a 90-minute trip each way to and from the fire break area making for long days for all. It was demanding but satisfying work, all agreed.

The work was arduous and at times dangerous for the "dozer" operators who worked alongside civilian contractors in extreme conditions. At times they had to evacuate the area at very short notice as wind shifts brought the fire front too close and visibility was reduced to a minimum.

Based at Erica DSE base, those personnel on duty on Christmas Day, were treated to a sumptuous feast by their hosts. This included lobster and more seafood than they could eat. Despite being away from family on the day it made it a memorable experience, said Captain Danny Lambert, the OIC at the time. A real plus was being involved with Army working with other government agencies and having the opportunity to show our capability said Captain Lambert.



2007 Urban Operations Training Facility

With the position of Land Commander Engineers being disestablished in 2006, 22nd Construction Regiment was now under command of 4th Brigade within the 2nd Division.

LTCOL John Raike was Commanding Officer during 2006 and 2008.

He had taken over from LTCOL Steve Bell who commanded in 2004/05

With the changes in Land Command in 2006 we welcomed a new Head of Corps, BRIG Wayne Budd CSC who was most supportive of the Regiment. 22nd Construction Regiment was now under command of 4th Brigade within the 2nd Division and BRIG Michael Arnold assumed command of 4 Bde in May 2007 upon his return from Iraq. The *"Castle"* reports that,

"In 1952, 91 Forestry Squadron (SR) then In 1994 was renamed 91 Forestry Troop. This was well supported as an essential niche capability of the Corps. 80 Quarry Troop has continued to grow and develop since its raising also in 1994, and now has guaranteed access to the Jaques heavy crusher until 2011 and hopefully will also continue to have access to a Komatsu portable crusher beyond that to provide quarry courses to Ares and ARA personnel from across the Corps. RHQ, 203 Works Sect, 39 and 105 Const Sqns are still providing genuine capability. The synergy obtained from the two-squadron structure is critical to the Regiment's ability to continue supporting the demands placed on the Army's construction elements and trades."

Most of the key personnel of the Regiment (WO1 Jim Davis, RSM, CAPT Glen Pilbeam, OC 39 Const Sqn, CAPT Noel Tipton, OC 105 Const Sqn, CAPT Peter Mercoulia, OC 203 Works Sect and CAPT Chris Reeves, OPSO) were veterans of the 2003 and 2006 bushfire DACC tasks, as were many of the soldiers. Emergency Response, Tactical Exercises Without Troops (TEWTs) were conducted and plans were put in place to provide a rapid and effective response should the Regiment be called out again. The CO highlighted that,

"I am confident the Regiment is well postured to conduct these operations with the same high standards, safe practices, and in the professional manner that we have developed over the previous DACC tasks."

The unit had earnt for itself an enviable reputation with its ability to respond to national priorities. Little did it know that this capability would again be needed in a few years' time on an even greater scale.

In 2007 various individuals were recognised for their contributions in raising of the capability within the Regiment and the Royal Australian Engineers. CPL Christopher Gray, a CDF Commendation, WO1 Noel Schwartz, the RQMS, was awarded a Land Commander's Commendation, MAJ Chris Reeves and CAPT Rick Conn a Divisional Commander's Commendation and WO1 Graeme Jones, a Conspicuous Service Medal for his four years as the RQMS of the Incident Response Regiment. A unique distinction saw SGT Fiona Ince being promoted and appointed as the first female Combat Engineer Sergeant in the Army.

In early 2007 the Regiment was tasked by the Combined Arms Training Centre at Puckapunyal to construct a facility resembling a typical village in the Middle East. The Urban Operations Training Facility (UOTF) was needed to enable training to be undertaken by various units prior to deployment. It had to include adequate space to allow movement by both foot and mounted in vehicles. The RSM at the time, Jim Davis explains,

"The site and location selected for the Urban Operations Training Facility was out in the middle of nowhere (near the original old Range Control) which added to the complexity of the task. The backbone of the project was 40 shipping containers (Connex's) of various sizes which all had to be modified to include doors, windows, stairs and ladders. In addition, the area that the containers occupied had to be prepared and levelled along with adequate drainage and tracks. Plant was critical to the task and involved a lot of plant hours. The task was completed with the result that the facility saw much training conducted by units such as the School of Armour, RMC and units conducting pre-deployment training including members of 4th Brigade with pre-deployment for Op Anode in the Solomon Islands."

Many are unaware of the Australia led Regional Assistance Mission to the Solomon Islands (RAMSI).

Australia committed 30 rotations to RAMSI over a 14-year period between 2003-2017. A total of 7,220 Australian military and police personnel deployed on this regional assistance operation, including 2,122 Reservists. Two members, Private Jamie Clark and Protective Service Officer Adam Dunning, paid the ultimate sacrifice. Operation *Helpem Fren* and Operation *Anode* focused on being a good neighbour alongside other Pacific Nation's helping the Solomon Islands resolve long-standing tensions over deep seated problems of land alienation and ethnic violence.



Colonel and Associate Professor Bob Breen OAM wrote volume five of the official history on peace, humanitarian and post-Cold War operations; *The Good Neighbour*, AWM, 2016. It covers peace support operations in the Pacific Islands including Bougainville and the Solomon Islands. Reserve sappers were critically involved in these operations.

In 2007 lead up training was undertaken to ensure all members of the 4th Brigade deploying to the Solomon Islands were thoroughly prepared to carry out their tasks safely and efficiently. The Adjutant of the Regiment, CAPT John Thurgood, supported the Brigade's Mission Rehearsal Exercise in the lead up preparation to Operation Anode, the ADF's support to the Solomon Islands. During his time in Cowie Beach, Queensland, CAPT Thurgood was the observer/trainer for platoon size groups rehearsing patrolling through mock urban villages.

Normal regimental military and engineer training continued. 39th Construction Squadron practiced and maintained vertical construction trade skills as well as project management skills with the construction and refurbishment of ATCO huts that became accommodation at the Squadrons Newborough Depot. An IET course was conducted by 4CER and held in the Newborough Depot in September that year.

105th Construction Sqn spent the early part of the year conducting Infantry Minor Tactics (IMT) training and demolitions at Puckapunyal. The IMT training focused on maintaining member's fieldcraft skills and included a course on the operation and use of night fighting goggles. The conduct of demolition practices was critical for the Squadron to maintain the skills necessary for the winning of rock and to maintain a heavy crushing capability.



In July the Regiment deployed seven members to support the Aboriginal and Torres Straight Island Commission (ATSIC) Army Community Assistance Program (AACAP). This program was a combined effort between the Army, ATSIC and the Department of Health and Aging to assist in the redevelopment and growth of environmental health infrastructure in remote Indigenous communities within Australia. The members deployed to *Doomadgee* in Far North Queensland where they provided trade support and assistance to 17th Construction Squadron.

The overall AACAP objective for that year was the construction of four houses with sheds and outside cookhouses, a public toilet block and a ten-lot subdivision employing both horizontal and vertical construction skills in a challenging and real environment.

The Regiment also deployed two members to PNG on *Exercise Puk Puk*, which is the Australian Army's support to the PNG Defence Force. WO1 Noel Christie and Sapper Alastair Rose provided supervisory and construction support to 3CER who was the lead element in the provision of assistance to the exercise. The Regiment welcomed back WO2 Andy Stokey who returned safe and well from a seven-month deployment to the Joint Task Force that had operated in and around Southern Afghanistan on OP Slipper II.

4th Brigade's Ex Hamel 07, saw the regiment deployed around the state with a troop detached to the Buckland Military Training Area in Tasmania. A portable sawmill operators' course and chainsaw training was conducted at Buckland including identifying, felling and milling of local timber whilst 39th Construction Squadron conducted a miscellaneous plant course at Newborough with particular emphasis on the in-service Skid Steer Loader.

During March 2007, LCPL David Harvey and SPR Leonard Campbell, both plant operators, supported the Directorate of Trials studying the blast effects on various materials and items of equipment at the range in Woomera SA.

In August 2007 CAPT Chris Reeves and LCPL Travis McInnes were members of the Army Nordic Skiing and Biathlon Association team competing in the ADF Cross Country and Biathlon Ski competition. Both playing a pivotal role, Army ultimately gained the ADF Trophy.

One of the Regiment's great characters, WO2 Bob Skinner, passed away on 2 September 2007 aged 62. A National Serviceman, Bob Skinner first spent time in 41 Railway Squadron before joining the Regiment and ultimately becoming its Chief Clerk.

2008

In 2008 an engineer, LTGEN Ken Gillespie AO, DSC, CSM, was appointed Chief of Army. Joining as an apprentice bricklayer in 1968 he was the first to rise to that position from a soldier. Also appointed in 2008 was the new Representative Colonel Commandant RAE, LTGEN Frank Hickling AO, CSC, along with BRIG Peter (Hutch) Hutchinson DSC as the RAE Colonel Commandant of Southern Region.

BRIG Wayne Budd CSC remained Head of Corps.

With LTCOL John Raike at the helm, 22 Construction Regiment had a much quieter start to the year with no calls to assist in the fighting of bushfires. Nonetheless, they remained postured and ready to deploy should the State Government again require assistance.

With a quiet start to the year, the usual mandatory lectures and training was conducted to greet the new incoming staff and unit members. During February and March five-day Ready Response Force (RRF) training was conducted at Newborough.

This training focused on qualifying Army Reserve personnel in various techniques to allow them to perform tasks in support of domestic operations such as disaster relief or potentially assisting the civil authority to meet a domestic security threat. Additionally, the unit worked hard to increase its commitment to the High Readiness Reserve (HRR) scheme.

Seven members of the regiment participated in a two-week chainsaw/tree felling course conducted by East Gippsland TAFE at Lakes Entrance. The students were trained in basic, intermediate and advanced chainsaw operation and tree felling with some of the students being qualified to fall trees more than 1000mm in diameter.

The regiment also undertook quarry operations for the year when a small team led by newly promoted SGT Fiona Ince. SGT Ince and her team carried out quarry operations including start-up operations for the crusher, crushing rock to stockpile materials for specified tasks within the Puckapunyal Military Area (PMA) and working with civilian contractors currently surveying and redesigning the quarry face.

The newly constructed marksmanship training range at HMAS Cerberus allowed regiment personnel to practice and fine tune their shooting skills, both in daylight and at night. Lead up training and rehearsals continued in North Queensland for members deploying on OP Anode to assist the Solomon Islands Government restoring law and order. Ongoing practice and training of skills used in the use and employment of service explosives and shot firing techniques, to successfully conduct quarry operations, was continued.

Normal social and commemorative events were well supported throughout the year including Army Birthday and Corps Birthday celebrations, a Regimental Ball and ceremonial activities, particularly marching as part of the 4th Brigade through Melbourne on ANZAC Day. CAPT Chris Reeves represented Army at the ADF Biathlon and Skiing Championships in Mount Buller as part of the Army team that for several years now has dominated and was again victorious in 2008.

The Regiment's RQMS WO1 Graeme Jones was awarded the Conspicuous Service Medal in the Australia day Honours for his meritorious achievement as the RQMS of the Incident Response Regiment (IRR) and BRIG Andy McGalliard was made a Member of the Order of Australia (AM) in the Queen's Birthday Honours for service to the ADF through engineering and leadership roles.

The ARTAP (Army Reserve Tranee Apprenticeship Program) trainees were growing in numbers, with an aim to see an increased ability to meet critical construction trades for the Army. Another Unit Establishment review is scheduled for 2009.

LTCOL John Raike had been the Commanding Officer during this extremely busy period from 2006 to 2008. He had taken over from LTCOL Steve Bell who had commanded in the period 2004 – 2005.



In his farewell remarks, the CO said,

"I have been privileged to command the senior Army Reserve Engineer Regiment in the Australian Army for the past three years. We have produced outstanding results, well above our weight of numbers, and I hope that you will be as proud of having served in the Regiment as I have been. I am confident that the Regiment is well postured for future tasking and is being left in very capable hands."

He would hand over to LTCOL Cam Smith in 2009/10 and LTCOL Darren Potter CSC would assume command in 2011.

2009 Bushfire Assist – (Black Saturday) – Broadford

By 2009, the apparent three year call out was anticipated by most members of the unit. Captain Noel Tipton again provides a detailed recollection.

"Most of 105 CS was ready to go and I was sitting on my back veranda with my gear packed. It was early Sunday morning 8 Feb 2009 when the phone rang and I was told to report to 4 BDE HQ at Simpson Barracks. I arrived within two hours and meet up with 22 CR RSM, WO1 Stewart Rutlidge and a detachment from 108 SIG SQN".

LTCOL Campbell Smith, the CO of 22 CR asked BDE OPS to "provide me details of the mission", as once again I was to command the first rotation. After a slight delay I was told to "head North, find the fire and do - good things". Luckily, Major Scott D' Rosario, a Policeman who later served in the UN Peacekeeping mission in Southern Sudan, was there and gave me a detailed list of his police connections in the fire affected areas.

After contacting the Senior Police sergeant at Kilmore and being directed to the Incident Control Centre (ICC) where emergency responses are coordinated. I selected the State Motorcycle complex at Broadford as the main staging area, the rest of the troops arrived over the next 24 hours

The first 48 hours provided some interesting moments; CPL Vic Morrow informed me day one that SPR Harrington was probably dead as he rolled the 155 Komatsu dozer backing it off the Transporter (S'liner). I asked him to confirm the soldier's condition to which he replied after checking, that he had in fact only bruised his leg!"



Photograph: "Briefing the Team". Captain Noel Tipton briefing members of 105th Construction Squadron at Broadford in February 2009 (Black Saturday).

"The dozer was rolled back on its tracks and declared battle worthy and work continued. A huge amount of work was done by 105 CS Plant Operators in the construction of many kilometres of containment lines and of course the combat engineers (CE's) were invaluable in the removal of dangerous trees and gaining access into fire affected areas to allow searchers to ID casualties".

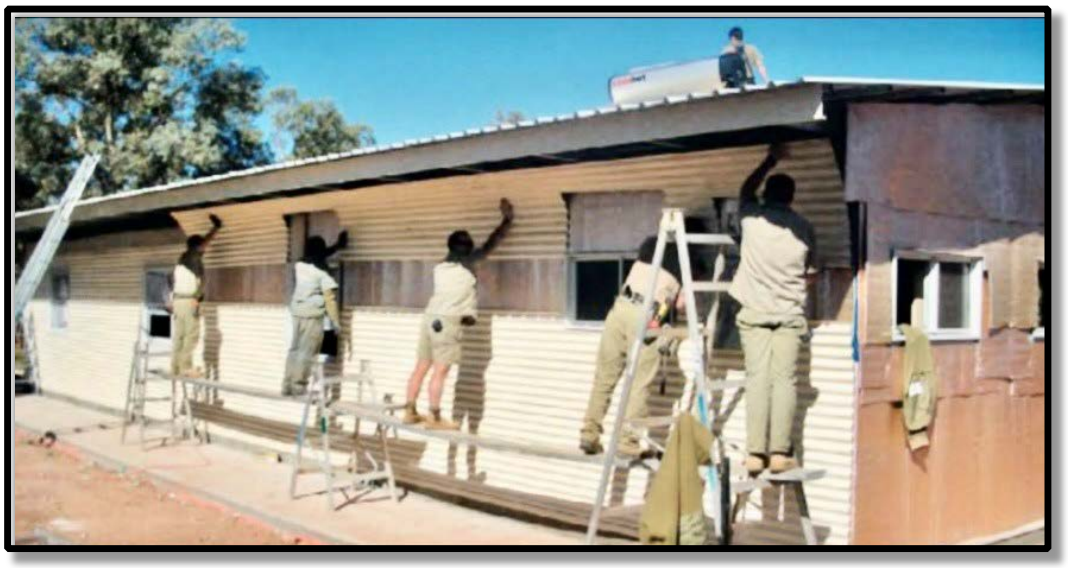
2010 Construction in the Desert - Pukatja

2010 was another busy year for 22 CR and 105 CS. Some interesting events that would shape 105 CS in the future included CAPT Russell Collins (Future OC 105) returning from East Timor to take up the role of ADJT 22 CR. WO2 Gary Lewis from 203 WKS was in East Timor and the Regular Army was looking more towards the Army Reserve for assistance on overseas operations.

105 CS had just finished the construction of a Lysaght Hanger for the School of Armour Museum and was setting out the footing for the new Lysaght Hanger in the Engineer Compound (both big jobs).

The previous year permission had been given for 22 CR to take on a discrete works component of AACAP 2010 at Pukatja in SA, a remote community five hrs drive south into the desert from Alice Springs. Unlike previous AACAPS, where the support was restricted to the delivery phase

only, this AACAP had involved the complete user requirement development, design and procurement of all materials. 203 Works Section completed this phase with great assistance from 105 CS in the period prior to deployment.



Sappers add cladding to a building in Pukatja SA

Commander 2 DIV had directed that the team doing the work not only consist of RAE tradesman but tradesman from other units. WO2 Wayne Scanlan (SPV CONST 203 WKS) was given the task of selecting suitably qualified tradesman from these other units. He ultimately selected CPL Scott White (108 SIG SQN - Elec), PTE Kevin Luck (2/10 Medium Regiment - C&J) and PTE Stewart Hindhough (5/6 RVR - Plumber). All three of these tradesmen were ultimately detached from their units and became members of 105 CS. Both SGT White and SPR Luck remain members of 105 in 2020.

The Construction task for AACAP 2010 was very successfully completed by the composite troop that mainly consisted of members from 105 CS. Tasks included the complete reconstruction of the football oval including two steel grandstands on each wing, repairs to the school canteen, shade shelters around the school yard and many minor improvements in the general community. 21 Const Sqn hosted us at their construction camp just out of town and the OC 21 Sqn was most impressed with the standard and amount of work completed.

Some of Capt Noel Tipton's many recollections of the trip include:

"The freezing conditions overnight in the desert that many of the soldiers had not anticipated, I had placed approximately 20 woollen blankets in one of the shipping containers as a backup for those who were under prepared. These were in high demand after the first night in camp. I also recall a very stiff and sore WO1 Christie (Electrical Supervisor) after a 48hr trip with SPR Schintler (S/liner DVR) back to Alice Springs to pick up construction materials.

Most of the team will remember the long trip on their day off to Ayres Rock (I slept in and rested that day) that took well over six hours there and back only to be told that it was too windy to climb the rock that day.

Everyone will well remember the night off on the return trip at the Norforce Depot in Alice Springs where full hospitality was provided at the Norforce Soldiers Club. WO2 Scanlan would also well remember searching Alice Springs in the early hours of the morning for a missing SPR Carpenter who eventually was found none the worse for wear".

2011 Afghanistan, Simpson Barracks, Wesburn

This was the start of a particularly busy year for Deployments that were to continue for the next decade.

LtCol "Cam" Smith (CO 22 CR) deployed to Solomon Islands and LtCol Darren Potter CSC took over in May. WO2 Wayne Scanlan (203 Bld Spv) had just returned from Afghanistan and WO2 Leroy Wyness (ARA 105 CS Bld Spv) had replaced him. CPL Borzdynski (203 Works Section draftsman) was about to deploy and Sprs from both 22CR and 4CER were in East Timor including several from 105 CS.



Opening the AABM road at Watsonia

Main tasks for the year were the completion of an access road for the Australian Army Band Melbourne (AABM) at Simpson Barracks, the Portal Frame erection and roof completion of the Lysaght in the Engineer Compound and the construction of an access road from the rock quarry to the Borrow Pit at Grenade Range 3 at Pucka and the access road to the Mountain District Pistol Club. The plant Operators of 105 received great experience working these projects despite testing the patience of WO1 Gary Lewis at times.

A very Young LT Alex Kocovski was one of the young Officers from 105 supervising the task and he wrote an article which appeared in the Sapper Magazine the following year.



Mountain District Pistol Club, road works – February 2011

The end of the year saw the team selected to deploy to East Timor in 2012 complete the construction of two buildings in the engineer compound as part of their Mission Ready Exercise (MRE), the buildings were named the Timor Huts.

On a sad note, SSGT Robert (Bob) Brasher passed away. Bob would travel from Colac and then return each Wednesday parade night. He was a wonderful contributor to 105 CS. An expert in forestry operations, he enlisted in 1974 and retired in December 2007 due to ill health.

2012 Timor Leste – More Construction

Captain Noel Tipton recalls in 2012,

"*Unknown to the team who deployed to East Timor in early 2012 was the fact that I had been selected late 2011 to deploy also in 2012. I arrived in time to work for a short time with the team they would be replacing and got to work again with CPL Chris Gray (105 CPL C&J) who was spending quite a bit of time away. It was much to the new team's surprise to be informed that although under command ANZAC COY that they would be working day to day for Capt Tipton - the FE.*

The members in the team included some from 4 CER and the following from 105 CS, LCPL John Farrren-Price (who replaced CPL Chris Gray), SPR's Ryan Appleby, Andrew Schintler, Laurie Crase, Ian Campbell (his second trip) and SPR carpenter who was in fact the electrician. A great book was put together by the team and a copy remains at Oakleigh barracks in the combined mess.

Whilst we were away the COMD 4 BDE officially opened the AABM road at Watsonia.

The second half of the year saw a "Renovation rescue" style upgrade of the HQ building at the Mill Site (Engineer Compound). The work was completed over a compressed 72-hour window and saw the tradesman of 105CS come up with some interesting solutions to complete the work within the timeframe.

A wet and windy weekend saw the Squadron complete the construction of a new cricket pitch for the cricket club at Puckapunyal a lot didn't show up because of the bad weather and I didn't blame them. The initial excavation was completely filled with water and some interesting drainage solutions were required to enable the concrete to be poured. I remember putting on my nail bag and using some young combat engineers to help me complete the formwork under lights (I was in 203WKS then as a PE). An excellent recreation of a bailey bridge (designed by RSM Steve Atliar) was constructed on the range and subsequently demolished. The unit hosted members of the "Old Sappers Association" and they got to ride in the new Bushmaster Protected Mobility Vehicle that had been built by Thales Australia in Bendigo and introduced for service in 1997. According to the old sappers, this was the highlight of the weekend."

As well as bushfires, the Regiment has been called out on DACC tasks in support of flooding Victoria. Particularly severe flood occurred in 2012 and the Regiment sent a team to Nathalia.

On an extremely sad note, LTCOL Steve Bell, who had been a previous CO of 22 CR (2004-05) and OC at 4CER, passed away suddenly on 17 September 2012 whilst on holidays in Italy. At the time, he was serving as a Military Attache to the Australian High Commission in Port Moresby, Papua New Guinea.



Nathalia Floods 2012



2013 Last Year as a Construction Regiment

2013 was a significant year in the history of 105 CS. It was to be the Regiments last year as 22 CR before becoming 22 ER. MAJ Scott D'Rozario (OC 105) wrote an excellent article for the Australian *Sapper Magazine* summarising the year, a short version is shown below with Capt Noel Tipton's recollections included:

"Tasks included the complete refurbishment of the classification range at Puckapunyal at short notice for AASAM (Australian Army Skill at Arms Meeting). The job was huge and required work day and night. CPL Geoff Smith and the plant operators worked tirelessly on the civil component. Engineer Surveyors from the Topographical Sqn helped with the set out of the range arcs. The tradies of 105 CS worked like maniacs on all aspects including lane markers, targets, stop butts and miscellaneous works.

The B vehicle sneaker range was constructed at Puckapunyal for the Directorate of Training Area management (DOTAM) with most of 105 CS camping out on site. CPL White, who we poached from 108 Sig Sqn in 2010, was instrumental as I recall with the delivery of this job, not sure he was officially a Sapper at this stage but was certainly one from the squadron's point of view.

CPL Steve (Devo) Devenish who is a civil engineer in civilian employment was the mainstay for the construction of a huge 30m long triple storey rock gabion blast wall at grenade range two. His team which included both tradies, plant operators and Combat Engineers did a fantastic job delivering the project in line with the design provided by 203 WKS.

He later converted from CE and is now a Plant Operator. LCPL Devenish (Devo) was running the building of the blast wall at the grenade range. The team was filling them by hand with Gabion Rock and by now Devo was getting sick of Gabion Rock having dealt with plenty on the Blast Wall at Grenade Range 2 a few years earlier.

We *arrived with the excavation and levelling done by SPR Schintler. Our task, make the Fabian baskets, stack them and fill them while backfilling to level with the existing hand grenade range level. Once level proceed past the natural level to a height of 2 baskets and the place formply on the face and a concrete grenade roll off to keel the grenades away from the wood. By the time I left we have the cages to height and had done the concrete works. The team then finished the cladding in the remaining 4 days*

The Crew consisted of Troop Commander, LT Nargiza Hakimova, Troop SGT Geoff Smith, Section Commander, LCPL Stephen Devenish, Section 2IC SPR Richard Fossett, Sappers - anyone we could find, Transport Coordination LCPL Camilleri

The work was hard and draining with us running out of the correct wire to tie the cages together and then ending up using high tea like fencing wire… giant bolt cutter and lack of manpower. There were completing tasks at the engineer compound, block work and that was given priority for a while.

In all a great job and great team. SGT Kit Turner (ARA PLT SGT) was dropping in the concrete weapon pits with the Tadano crane into excavations previously dug by the likes of Andrew Schintler, Phil Rees, Ryan Appleby and Dave Szalay. WO1 Lewis was again giving the direction on the road construction task well supported by SGT Geoff Smith and the other plant operators.

As of 25 October 2025, the site has been demolished".







203 WKS had designed a new toilet block for the Engineer Compound to replace the old CGI version that had been used for ever and work had started on that. Some of the CE's had done a block layers course at Holmesglen TAFE and they assisted the other tradies in the early stages of this job. I remember SPR now CPL Duck using his new block layer skills on both this job and the B vehicle sneaker range task. the reserves by this time having been the Regular Army OPSO at 22 CR.The end of this year was quite poignant knowing that 22 CR would cease to exist, with 22 ER taking over as at Jan 2014. The good news was that 105 CS Sqn would continue on as a sub unit of 22 ER and be involved with some excellent construction work planned for South Bandiana in 2014."

I also recall Maj D'Rozario getting ready to command the transit Security Element (TSE) which he did with great success in 2014. This allowed MAJ Anthony (Tony) Johnston to take over command of 105 in mid-2014 and remain there until the end 2015."

2014 The Amalgamation



The Amalgamation Parade at Watsonia, Simpson Barracks 2014

4 CER and 22 CR amalgamated at a parade at Watsonia Barracks on 1 January 2014 to become the 22nd Engineer Regiment (***Victoria's Own Sappers).*** Sub-units of the newly formed regiment included 8th and 10th Combat Engineer Squadrons, 105th Construction Squadron and 203rd Works Section.

This was the first year for the new 22 ER with 105 CS still operating as a subunit. It also spelt the end of 39 Construction Squadron who were folded into 105 CS and became 39 Resources

Troop. This troop had significant capability in forestry operations and timber milling, 203 WKS had been planning and developing a major construction task over the previous 12 months that focused on the delivery of work for Army Logistic Training Centre (ALTC) at South Bandiana. 105 CS took the lead in the delivery of this work over the AFX, closely supported by 203 WKS. The work was funded to the tune of $100,000 by ALTC and included roads, culverts, flood ways and an extensive defensive position that featured unique drop in pre-cast concrete weapon pits.

Construction Troop, who by now were referring to themselves as "Goat Troop", after an incident at the B Vehicle Sneaker Range the year before, were working in a quiet section of the AO on a large box culvert. Captain Tipton recalls;

"Arriving on site one day and observing several of the workers dressed rather unusually, they all had correct PPE and had weapons close at hand in keeping with the tactical situation, but several were minus their trousers. Apparently, the challenge for that day was to choose between your, weapon, webbing or pants, noting that you could only have two of the three, PPE was not negotiable!"

Scott White had settled in well to the RAE by now and was running the site. He was well supported by Laurie Crase (minus his pants), Brandt Ebeyer, Simon Hawley, John Emerry and Duncan Keith on the excavator. LT Dave Ferwerda took an excellent time lapse record of the build via a camera set up in a tree adjacent to site.

The Combat Engineers of the Regiment were fantastic workers assisting both the Tradesman and Plant Operators as required. They also kept the tactical situation aligned with the Rear Area Security Operations theme selected by RHQ.

On a sad note, this was the year that CPL Gordon Lark passed away (29 Oct 14) having enlisted in 1981 and serving for more than 20 years in the reserves (including with 105 CS).

During this period, great opportunities were available for officers and soldiers to gain practical operational and leadership experience. Many came from diverse backgrounds.

Scott D'Rozario for example, came from a policing background and had graduated from Monash University in 1997 with Bachelor of Commerce (Accounting), and in 2002 with a Bachelor of Arts (Psychology). Whilst studying, Scott enlisted into the Army Reserve as a Medic. He commenced officer training at Monash University Regiment and graduated as a Second Lieutenant in the Royal Australian Engineers in 2004.

As well as appointments in the 4th Combat Engineer Regiment, 22nd Construction Regiment and various Non-Corps, Training and Staff postings within Victoria, Scott relished the opportunities for service on operations. These included Operation VicFires Assist in 2009 as the Operations Officer for the Kinglake Area of Responsibility, Operation Astute in Timor Leste in 2011 as a Civil Assessment Team Member, and again in Timor Leste in 2012 as the Policing Liaison Officer for the Commander Joint Task Force 631.

In mid-2014 Major D'Razario deployed on Operation Resolute conducting Border Operations as the Company Commander of a deployed Tri-service Company. For his command and leadership during Operation Resolute Scott was awarded an Army Bronze Commendation.

Later, in 2018, Scott would deploy to South Sudan on Operation ASLAN as an Operations Officer in the Multinational Joint Interagency Operations Centre within the UN Peacekeeping Force. Promoted to Lieutenant Colonel in 2019, domestic operations would feature with planning roles supporting COVID-19 and Bushfire Assistance. Scott would become the Commanding Officer of 22nd Engineer Regiment in 2021.



Scott D'Razario

2015 The Road to Hamel

Coinciding with the centenary of the ANZAC landings, the new School of Military Engineering (SME) became fully operational in 2015 with world class purpose-built training facilities. With the transition from Casula complete, the new home for Australian Sappers was now Holsworthy.

Co-located with the new school a newly constructed Corps Museum (Australian Army Museum of Military Engineering) was established with the important role to collect, preserve and exhibit the history of the RAE and RASvy by showcasing the ongoing story of Australian sappers. Integrated into the very ethos of all training conducted at SME, the museum is a wealth of sapper ideas and techniques and was funded as part of the SME relocation. It is well utilised by students and visitors alike. As the curator at the time, Sebastion Spencer, so aptly said,

"*It is not just a building of old stuff; it is a living and breathing collection of Australian Sapper history. Displays are climate controlled and constantly rotated to keep the museum fresh and vibrant. Preserving history provides invaluable lessons for the future".*



Back in Victoria, LTCOL Glen Pilbeam had commanded 4CER throughout 2012 and 2013 and was appointed the inaugural commanding officer of the newly formed 22 Engineer Regiment on 1 January 2014. An amalgamation of Victorias' two Army Reserve Engineer Regiments, 22nd Construction Regiment and 4th Combat Engineer Regiment, had successfully integrated the fine traditions and historical linages from both the combat and construction sappers located in Victoria.

Many specialist sapper skills (forestry, quarrying, high voltage electrical etc.) had resided within the now defunct Supplementary Reserve scheme that had enjoyed a direct heritage to the original 22 Construction Regiment (Supplementary Reserve) raised in 1950. The Platypus was adopted by the new Regiment as its unit mascot and emblem - it had enjoyed a long association with Victoria's combat engineers.

The Road to Hamel – 22nd Engineer Regiment's Path to Readiness

On 22 November 2014, Lieutenant Colonel Michelle McCormack assumed command of the 22nd Engineer Regiment, Michelle was the first female CO of the Regiment and was ready to lead the unit through a pivotal year of transformation and preparation. With a clear focus on the future, the Regiment began 2015 committed to its role in the Army Reserve (ARES) Reinforcing Battle Group JACKA's READYING year — a journey that would culminate in the major certification activity, Exercise HAMEL, in July 2016.

This period marked the beginning of a new era under PLAN BEERSHEBA, which restructured Army's force generation model. As part of this initiative, 22 ER collaborated with 3 Field Squadron (9th Brigade, South Australia) to form a combined Engineer Squadron in support of 1st Combat Engineer Regiment and a Battle Group JACKA, aligned with 1 Brigade.

The combined Engineer Squadron first operated together during Exercise COURTNEY'S POST in May at Cultana, and again in October during Exercise POZIERES. These activities laid the foundation for what became known as "The Road to Hamel" — a high-tempo training pathway focused on survivability and combat engineering tasks.

Throughout the year, the Regiment concentrated on developing and refining key warfighting skills, including:

- Engineer wiring and protective minefield emplacement
- Mobility operations, such as route clearance and route checks
- Counter-mobility support to combined arms teams in conventional warfare scenarios

One of the key training events, Exercise PLATYPUS DENIES (July), tasked Battle Group JACKA with denying enemy access to the Puckapunyal Training Area. For the Engineer Squadron, this meant delivering counter-mobility support to two infantry-based combat teams — a scenario that tested the Regiment's tactical integration and operational effectiveness.

As 22 ER progressed through the READYING phase of the Force Generation Cycle, training standards continued to rise.

The CO stated that, *"between June and September, the Regiment conducted an in-house, non-continuous Subject 4 Corporal Combat Engineer Advanced Phase 1 course, with over 20 Sappers successfully completing this critical qualification — a significant investment in the Regiment's future leadership and capability.*

The Regiment's depth of experience continued to grow, with many members bringing operational service backgrounds. Personnel from both 4th and 9th Brigades contributed to the BG JACKA Engineer Squadron exercises in Adelaide and Puckapunyal, while the remainder of the Regiment focused on achieving key Mission Essential Tasks (METs) — particularly in construction."

Throughout 2015, 8th and 10th Combat Engineer Squadrons, along with 105th Construction Squadron (under the command of MAJ Tony Johnson), maintained a demanding training schedule. Their activities incorporated a wide range of essential skills, including:

- Initial Military Training (IMT)
- Weapons handling and marksmanship
- Mine warfare and field craft
- Use of combat helmets, body armour, and night vision equipment
- Mobility and counter-mobility operations

The tempo continued through to November, with participation in Junior Officer Training, hosting the 4th Brigade Military Skills Competition, and preparing for Domestic Assistance to the Civil Community (DACC) tasks ahead of the Christmas stand-down period.

Meanwhile, members continued to attend promotion and specialist courses, regrouping in preparation for the challenges of 2016.

In summary, 2015 was a year of intense activity, professional development, and operational achievement. The Regiment's commitment to excellence and adaptability ensured it was well-prepared for its role in Exercise HAMEL and beyond — a testament to the enduring capability and spirit of the Sappers of 22 ER.

Also in 2015, COL John Wertheimer AM, RFD was appointed Patron of the Royal Australian Engineer Association of Victoria (RAEAV) (Incorporated) and brought a wealth of experience, distinguished service, amazing connections and utter enthusiasm to the role.

On the historical front, the Australian War Memorial (AWM) in collaboration with the RAEAV, under Vice President, LTCOL Don Hughes, hosted a Demining Seminar in July 2015 at the Heidelberg Repatriation Hospital in Melbourne. The seminars' aim was to record the official history of demining and peacekeeping operations (ONUMOZ) in Mozambique by interviewing participants from around the country and sharing a smorgasbord of memorabilia procured during OP CORACLE.

Ultimately, Associate Professor Bob Breen PhD and the Senior AWM Senior Researcher Miesje de Vogel produced two chapters for the Official History of Australian Peackeeping, Humanitarian and Post-Cold War Operations, *The Limits of Peacekeeping*, AWM 2019.

2016 Timor Leste continues

The year 2016 marked a significant chapter for the 22nd Engineer Regiment (22 ER), with several key events reinforcing the unity and legacy of the broader sapper family across Victoria.

With many Vietnam veterans entering their later years, there was a renewed focus on honouring their service through meaningful commemorations. On 21 February, a graveside vigil was held for Sapper Dennis Brooks at Springvale Crematorium. Sapper Brooks succumbed to wounds sustained in the Barrier Mine Field incident in Vietnam on 10 May 1967, which also claimed the lives of Sapper Terence Renshaw and Sapper Ramon Deed.

The service, conducted by Corporal Allan "Blue" Rantall and Craftsman Reno Borg, was deeply moving. Colonel Brian Florence AM, MC, former commander of 1 Field Squadron in South Vietnam and Lieutenant Colonel Don Hughes, Vice President of the RAE Association of Victoria, laid wreaths in tribute.

An excursion to the newly established Vietnam Veterans Memorial in Seymour took place in October. The memorial features a commemorative wall inscribed with the names of 66,000 Australians who served in the conflict, including Warren Hardy, who deployed under the Supplementary Reserve Scheme. The visit also included Site 17, now known as Light Horse Park, where the Regiment had played a key role in constructing walkways and bridges.

The RAE Association also visited the new School of Military Engineering on 12 March and toured the Heidelberg Repatriation Hospital in May.

The Regiment continued its progression along the "Road to Hamel." Under the command of MAJ Scott D'Rozario, the Battle Group Jacka (BG JACKA) Engineer Squadron was formed, comprising two Combat Engineer Troops and a Composite Construction Troop. Personnel from 3 Field Squadron (South Australia) and 22 ER integrated to form Jacka Squadron, which was placed under operational command of CO 1 CER.

Reflecting on the journey, MAJ D'Rozario noted:

"*During 2015, the lead-in exercises—Courtneys Post, Predator Run, and Pozieres—challenged our mobility, counter-mobility, and survivability skills while driving procedural innovation. In 2016, following EX PREDATOR'S GALLOP, we deployed to Cultana for EX HAMEL as the Engineer Squadron. Reinforced with additional capabilities, we were tasked to establish a fourth Squadron of 1CER. And then the Jacka Squadron were made the HQ for BG Jacka's largest Combat Team in the BG to manage and coordinate an Internally Disrupted Camp (IDC). Overall, the road to Hamel was a tremendous success."*

During EX PREDATOR'S GALLOP, the Regiment also conducted a Plant Operator course and an MR2 Drivers course. In October, EX PLATYPUS CONSTRUCTS—led by 105 Construction Squadron—focused on further development of the Engineer compound at Puckapunyal.

In her annual reflection published in *Sapper Summit*, Commanding Officer Lieutenant Colonel Michelle McCormack highlighted the 16 months of dedicated training undertaken by JACKA Engineer Squadron to meet its READY year commitments.

The sapper community mourned the passing of Mick Mace MM, BEM, on 11 October. A veteran of North Africa, El Alamein, New Guinea, Tarakan, and South Vietnam, Mick Mace was an extraordinary soldier whose legacy was honoured at a well-attended ceremony. On 11 November, the "*Engineers Tree*" was formally dedicated at the Melbourne Shrine of Remembrance.



Lieutenant Colonel McCormack CO and WO1 Tony Luchterhand, RSM 22 ER

A Family Day was held at Oakleigh Barracks on 20 November, fostering esprit de corps among members and families. WO1 Tony Luchterhand, RSM 22 ER, delivered the annual Clive Steele Lecture, focusing on the Special Operations Engineer Regiment (SOER).

In December, Lieutenant Colonel McCormack represented the Regiment at the inaugural meeting of the Sir John Holland Awards Board.

2016 EXERCISE HARI'I HAMUTUK – TIMOR-LESTE

International capability building exercises featured in this year. Exercise Hari'i Hamutuk 2016 involved Victorian Sappers working alongside Japanese, Timorese and United States military personnel in Timor-Leste.

From 26 September to 11 November 2016, Victorian Sappers took part in a multi-lateral exercise to build new facilities for the Timor-Leste Defence Force and enhance engineering

skills at Hera Naval Base, Metinaro Military Base, Metinaro Health Clinic and Baucau Military Base.

Corporal Scott White and LCPL Ryan Appleby, both from 105 Construction Squadron, utilised their civilian skills and supervisory experience in construction and plant equipment during the exercise.

2017 More tasks than we can train for.

2017 marked the passing of Warrant Officer Class One John Printz OAM on 25 May 2017. A proud Victorian sapper and Vietnam veteran, WO1 Printz served as the Regimental Sergeant Major of 22 Construction Regiment in 1992–1993. He was awarded the Medal of the Order of Australia in January 1992 for his tireless advocacy and support to the veteran community.

By mid-2017, 22ER had successfully completed its READY year, concluding the first cycle of the Force Generation Cycle. Under the command of Lieutenant Colonel Michelle McCormack, the Regiment reflected positively on its achievements over the preceding three years and identified key areas for future focus. In her July message published in *Sapper Summit* (Issue 96, p.8), LTCOL McCormack noted:

"The ongoing conflict of conducting and balancing realistic, challenging and varied training whilst participating in various exercises and operations remains a challenge."

Throughout the year, 22ER personnel remained actively engaged in both internal and external training activities. Members participated in Exercise BOARS SPRINT alongside 1st Combat Engineer Regiment (1CER) and contributed to the Army Aboriginal Community Assistance Program (AACAP) with 6th Engineer Support Regiment (6ESR). Additionally, the Regiment provided plant operator support and instructor augmentation to various training centres.

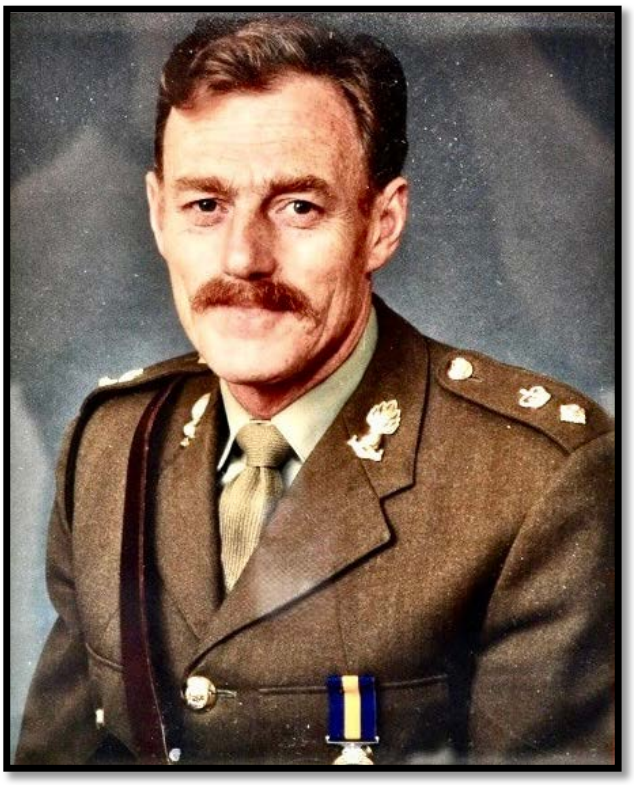
LTCOL McCormack further emphasised:

"As sappers, we will always have more tasks than available time to train, so we will continue to prioritise what we train and the level and standard to which we do so."

Training activities spanned weekend exercises at Puckapunyal, block training at Cultana, and joint operations with 3CER and Battle Group JACKA. In 2017, the Regiment also increased its support to ANZAC Day commemorations, opting not to conduct its traditional Dawn Services at Oakleigh or Ringwood. This decision, as highlighted by RSM WO1 Tony Luchterhand, allowed soldiers to engage more directly with veterans in the community:

"This gave our soldiers a wonderful opportunity to more closely mix with other veterans in the community."

The Royal Australian Engineers (RAE) Association of Victoria welcomed a new President, Mr Bill Van Ree, succeeding inaugural President Mr Colin Bowater. Colonel Bruce Murray AM assumed the role of Colonel Commandant – Southern Region, taking over from Brigadier "Hutch" Hutchinson DSC.



LTCOL Colin Bowater inaugural President of the Royal Australian Engineers Association of Victoria (inc)

2018 The Readying Year commences

In 2018, command of 22ER transitioned to Lieutenant Colonel Sharon Coates, supported by Regimental Sergeant Major WO1 Justin Jones. The Regiment commenced its Readying year with a well-attended induction and planning activity, setting the foundation for a high-tempo training cycle.

In March, 22ER participated in Exercise JACKA CRAWLS, a combined 4th and 9th Brigade activity held at Puckapunyal. The exercise included 3 Field Squadron, which deployed from South Australia to conduct engineering tasks such as wiring, battle noise simulation, demolitions, and both vertical and horizontal construction. The activity also tested interoperability through combined arms operations with other Brigade elements.

During Exercise JACKA CRAWLS, sappers constructed the Combat Team's main defensive position, incorporating overwatch and early warning systems to protect the Forward Operating Base (FOB). This included the installation of rocket screens and Hesco barriers. Sappers also supported Cordon and Search operations, conducting area and route clearance tasks while embedded with 5/6 RVR and 8/7 RVR, and mounted in PMVs (Bushmasters) provided by 4/19 PWLH.

Exercise SPUR HAYRICK, conducted in April, focused on the planning, placement, and controlled initiation of demolition charges on a range of targets including a notional Bailey bridge, culverts, wire obstacles, tetrahedrons, and simulated urban infrastructure such as doors and windows

In September, 22ER participated in Exercise PREDATOR WALK with 1CER at Cultana, further enhancing its operational readiness and joint capability.



The Regiment maintained its longstanding association with Fort Queenscliff, a site of historical significance to the RAE since 1860. Colonel Bruce Murray AM, newly appointed Colonel Commandant – Southern Region, previously served as Commanding Officer of the Soldier Career Management Agency (SCMA), which had been co-located at Fort Queenscliff since 2001.

Fort Queenscliff, located on Shortlands Bluff, played a critical role in the defence of Port Phillip. From 1883 to 1946, it was continuously garrisoned and, along with other fortifications around the heads, was considered one of the most heavily defended harbours in the British Empire. It also served as the home of the Australian Army Command and Staff College from 1946 until its amalgamation into the Australian Defence College in 1999. In May 2018, the RAE Association of Victoria conducted a visit to Fort Queenscliff, with Colonel Murray AM serving as the tour guide, reinforcing the enduring connection between the Regiment and this historic site.

2019 The Readying Year continues – Combat Engineering

The 22nd Engineer Regiment (22ER) commenced 2019 with a focus on planning and preparation for its Readying year under the Force Generation Framework. Officers and senior non-commissioned officers gathered at Newborough to refine operational planning in anticipation of Exercise Talisman Sabre, scheduled for July at Shoalwater Bay, Queensland.

Throughout the year, 203 Works Section and 105 Construction Squadron, under the command of Major Steven Twidale, conducted multiple plant operator courses. These activities included significant upgrades to Walkers Track at the southern end of the Puckapunyal Range and continued improvements to the Engineer Compound at Puckapunyal.

Combat engineers conducted joint training with 3 Field Squadron and 1st Combat Engineer Regiment (1CER) during Exercise GOANNA WALK at Cultana, enhancing interoperability and readiness for Talisman Sabre. Reflecting the Regiment's strong supplementary reserve heritage, 22ER also conducted Exercise SPUR WINTHROP in partnership with Southeast Water. This engineer search activity ensured the integrity and safety of water storage infrastructure on the Mornington Peninsula, demonstrating Defence's commitment to supporting critical civilian utilities.

Later in the year, 22ER participated in Exercise SOUTHERN MAGPIE, a nine-day Domestic Incident Security Force (DISFOR) activity conducted in conjunction with Victoria Police. The exercise focused on securing Loy Yang Power Station in the Latrobe Valley, reinforcing Defence's capability to support domestic security operations.

Internationally, 22ER personnel deployed to the Middle East and participated in Exercise BALIKATAN in the Philippines. Additionally, a team supported Army Aboriginal Community Assistance Program (AACAP) tasks across Australia.

Domestically, the Regiment contributed to the Army Indigenous Liaison Program by supporting Worawa Aboriginal College in Healesville. Engineers constructed a cultural dance area, basketball court, and beach volleyball court, strengthening Defence's relationship with Indigenous communities and promoting cultural engagement.

On the ceremonial front, 22ER provided the catafalque party for the ANZAC Day AFL match between Collingwood and Essendon at the Melbourne Cricket Ground (MCG), a prestigious and visible representation of Army's enduring connection with the Australian public.

As well as supporting the 22 ER busy readying year cycle various Exercises in South Australia (Cultana), Shoalwater Bay and the Latrobe Valley, members of the Squadron found themselves in the Middle East Area of Operations (MEAO), the Philippines, on more AACAP tasks in NW Australia, continued training courses and enhancements to the Puckapunyal Training Area. Particularly further works to the Engineer Compound, along with Indigenous support to the ***Worawa Aboriginal College*** with the construction of numerous enhanced facilities.

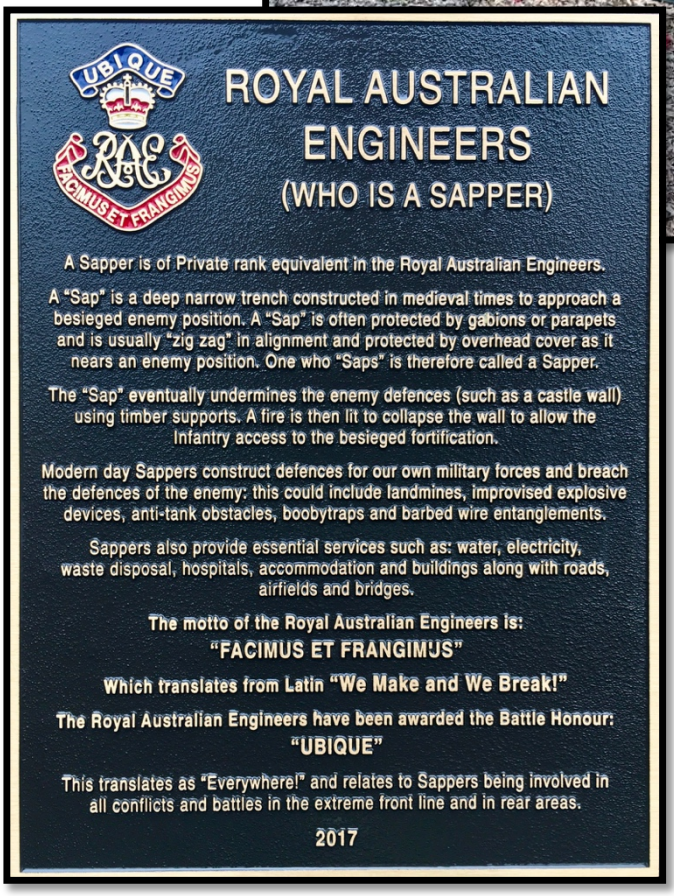


The Squadron also constructed the Bailey Bridge Engineers Memorial, ***The Bridge of Repatriation***,(below) in Sapper's Lane at the Heidelberg Repatriation Hospital. The memorial celebrates a century of Repatriation in Australia. It was designed by Capt (now Maj) Alex Kocovski, a civil engineer with VICROADS and built by sappers of the squadron as part of several tasks during the 2019 Annual Field Exercise (AFX)

Little did the Squadron realise the challenges it would face in 2020. Maj Jamie Twidale CSM was in the process of moving employment from the State Emergency Service to the HQ of the Victorian RSL, as Chief Executive Officer (CEO). He and his team had a wealth of experience and training that easily justified the original Supplementary Reserve concept born out of the lessons of WWII of having well trained engineer units available and able - to support our country in time of need.



The Bridge of Repatriation at Heidelberg Repatriation Hospital





CHAPTER SEVEN

Bushfires, Sappers assisting Victorians



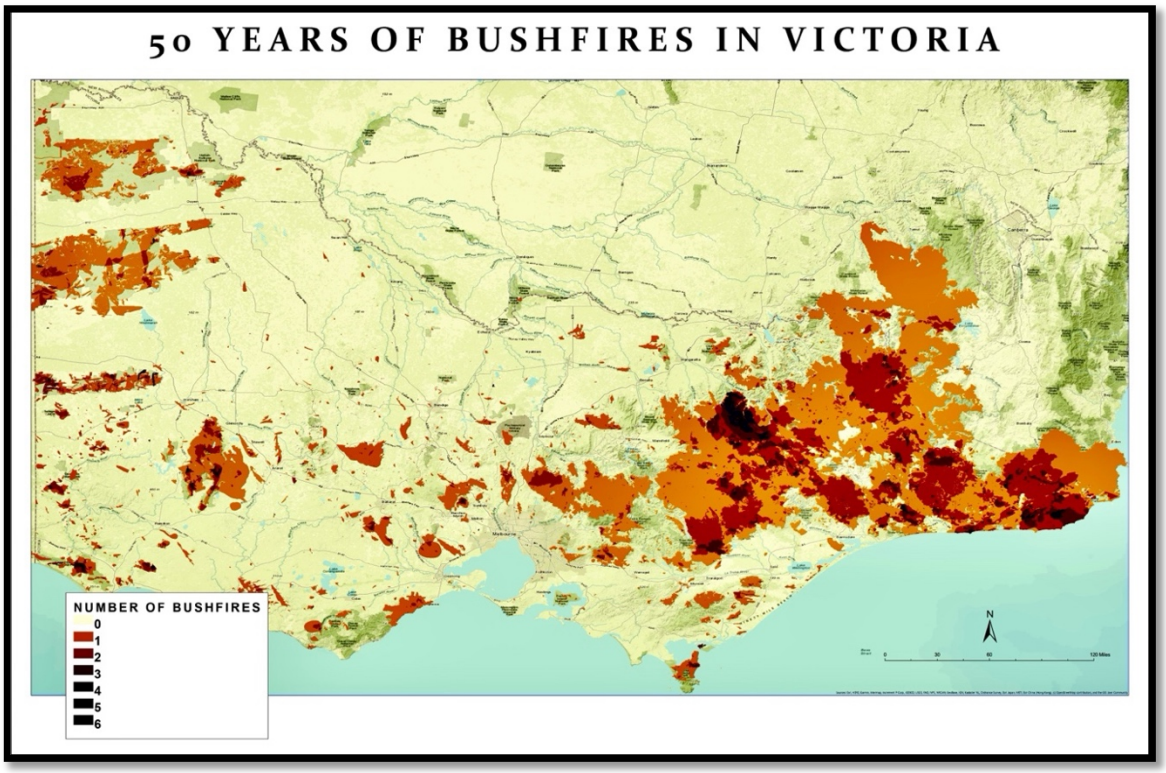
A collage using salvaged materials entitled "Sappers Saving Victoria" depicts engineer tasks during Operation Bushfire Assist in Eastern Victoria 2020 (Black Summer). It was presented to 22nd Engineer Regiment (Victoria's Own Sappers) in appreciation by the Royal Australian Engineers Association of Victoria.

A History of Bushfire Assistance

Victoria has a long history of devastating bushfires, including Black Thursday 1857, Red Tuesday 1898, Black Friday 1939, Ash Wednesday 1983 and the most lethal Black Saturday 2009, which killed 173 people. The extensive Black Summer fires in 2019/20 saw our continent ablaze.

These events were caused by a combination of drought, heat, strong winds, and low humidity. Widespread destruction to homes and infrastructure, along with loss of life also occurred.

In the aftermath of the Ash Wednesday fires in 1983 22nd Construction Regiment was formally tasked to construct a Bailey Bridge over the Hopkins River in Framlingham in Western Victoria.



Map of all the bushfires in Victoria in the last 50 years (Wikipedia)

Many sappers in the regiment had extensive experience in the planning and construction of Bailey Bridging because of their employment in the sponsoring authorities.

More formalised and refined defence aid to the civil community procedures developed over the ensuing decades to assist in natural disaster and weather events. Both the Black Saturday

and Black Summer bushfires were formalised as OPERATION BUSHFIRE ASSIST 2009 and OPERATION BUSHFIRE ASSIST 2019/20 respectively.

A medal was struck in 2011 by Queen Elizabeth 11, the Australian National Emergency Medal, to recognise sustained or significant service in response to such emergencies. Various criteria needed to be satisfied to receive the medal.

2019 Bushfire Response

In December 2019, Australia faced an unprecedented bushfire emergency, prompting the launch of Operation Bushfire Assist 19/20. The scale and intensity of the fires, particularly in Victoria, required a coordinated national response, including the mobilisation of Australian Defence Force (ADF) Reserve elements. This marked a historic moment—the first time in Australian history that the Governor-General enacted the "Call Out" provisions under the Defence Act, authorising the compulsory deployment of Reserve personnel to support domestic emergency operations.

The 22nd Engineer Regiment (22ER) as part of Joint Task Group 646.2 was called upon to lead key components of the land force contribution to this critical operation. Drawing on its deep operational experience and unique capabilities, 22ER rapidly transitioned to support the multi-agency recovery effort. Sappers of all ranks and trades brought essential skills in plant operation, field engineering, and logistics, but equally vital was their ability to operate safely and effectively in hazardous environments. Their training in austere conditions and capacity to integrate with emergency services proved indispensable.

The Regiment played a significant role in supporting East Gippsland communities, which were among the hardest hit. Engineers assisted in recovery and rebuilding efforts, including debris clearance, infrastructure assessments, and community support tasks. In Mallacoota, which had been isolated for several days due to fire damage and the closure of National Highway A1, 22ER personnel worked tirelessly with DELWP to restore access and support local residents until the route could be reopened to civilian traffic. As part of the broader recovery effort, 22ER worked closely with international and domestic partners, including the Republic of Fiji Military Forces (RFMF), 1st Combat Engineer Regiment (1CER), and the Papua New Guinea Defence Force (PNGDF). This collaboration demonstrated Defence's ability to operate in a joint and multinational environment, enhancing the effectiveness of the response and reinforcing regional partnerships.

The Regiment's contribution extended beyond tactical support. Many members possessed significant operational-level experience in disaster response, including prior involvement in bushfire emergencies. This dual civilian-military expertise enabled 22ER to provide agile, informed, and community-focused support.

Commanding Officer LTCOL Sharon Coates, a Civil Engineer raised in regional Victoria, exemplified this capability. She had previously played a key role in Operation VIC FIRES ASSIST 2009, coordinating headquarters operations in Kinglake. Her responsibilities included managing community water tank locations, organising debris clearance teams, attending

community briefings, and facilitating coordination between Defence and Victoria Police. Her experience underscored the Regiment's ability to operate effectively within a multi-agency framework and deliver meaningful support to affected communities.

The 2019–2020 bushfire emergency reaffirmed the Regiment's readiness, adaptability, and commitment to serving the Australian community. The professionalism and dedication of 22ER personnel during this crisis reflected the highest standards of service and reinforced the vital role of Army Reserve units in domestic operations.

The diversity of civilian employments and skills gave the Army Reserve Sappers a distinct advantage when dealing with traumatised and distressed communities

2020 OP Bushfire Assist – (Black Summer) A Continent Ablaze

On January 4, 2020, the Governor-General of Australia, the Honourable David Hurley AC, DSC (Retd), signed an order under the *Defence Act 1903* to call out Australian Defence Force Reserves to assist with civil emergency and disaster relief. The order complimented and extended existing ADF support arrangements that had been in place for a number of months supporting bushfires, particularly in Queensland.

The order however was unique, it was the first time ADF Reserves have been called out for an unlimited duration for full-time duty. Exactly the intent of establishing the Supplementary Reserve seventy years previously.



Commissioner Andrew Crisp, LT COL Sharon Coates and MAJGEN Jake Elwood Cmdr 1 Div, meeting the Fijian contingent 23-1-20 at Camp Davis, Orbost (football ground).

Members of 22 ER had already deployed in small numbers to assist the bushfire effort in 2019, particularly in Queensland, New South Wales and Victoria. Many more followed to assist

Commanding Officer of 22 ER, LtCol Sharon Coates, a civil engineer and project manager in civilian life, was appointed the Task Force Commander 646. Her officers and sappers carried out a multitude of tasks to support the bushfire crisis.

The diversity of military engineering support given to the national effort by the Victorian Sappers to Task Force 646 OP BUSHFIRE ASSIST produced outstanding results. Sappers should feel proud of their achievements. The Regiment received great praise with several well-earned awards and accolades:

LTCOL Sharon Coates	COMD TF 646	Conspicuous Service Cross
WO1 David Ryan	RSM (Acting)	Federal Electorate of Menzies Australia Day Award
SGT Luke van Bakel	Operations Officer (Acting)	Bronze Level Commendation
CPL 'Dicko' Dickson	Operations	Commander's Award for Excellence

The call out was a popular, and necessary, decision overwhelmingly welcomed by the Australian public. The broader retired sapper community were also keen to contribute in any way they could.





The Regiment, along with the RAE Association, fielded many enquiries and offers of assistance. Unfortunately, constitutionally and legally, it was not possible for volunteer retired sappers to be used for ADF operations. This response, however, did highlight that a large pool of expertise readily exists within the community. The RAE Association conducted a BBQ style sausage sizzle in Warrandyte to raise funds for the bushfire effort.

To summarise the amazing contribution to Bushfire Assist by the Regiment, three personal experiences are provided by unit members who were intimately involved: Captains Thomas Mulholland, Andreas Bischof and Colin Nelson. Assisting to provide balance, are perspectives from Sapper Sam Pang and Sapper Scott Balestra.

Operation Bushfire Assist – An Overview Bairnsdale

Captain Thomas Mulholland, an officer with 22nd Engineer Regiment provides an overview of the assistance in 2020.

"*Over the course of January and February 2020 Australian Army Reservists were deployed on OPERATION BUSHFIRE ASSIST 19-20 (OP BA) to provide support to the Victorian State Government in the effort to help communities affected by bushfires throughout Gippsland. The Sappers of the 22nd Engineer Regiment were among the first soldiers deployed providing support throughout the entire operation in a variety of roles as part of Joint Task Force 646 (JTF646). My role throughout the operation was the squadron 2IC of the Engineer Squadron, callsign E10, within JTF646.2 in the East Gippsland Region.*

The lead up to the call out was filled with speculation as to whether it would actually go ahead. In previous years Defence Aid to the Civil Community (DACC) tasks were based on a call for support basis. Most members of the Regiment were prepared to provide DACC support, but no one expected the level of commitment that was provided. As Engineers are always in high demand, preparation for DACC is a yearly occurrence and the Sappers were prepared for a 48-hour notice to move task in the event of a DACC requirement. Personnel started to deploy on OP BA from as early as the 26th of December as the demand for Army support increased from the State Government – full credit to our Construction Engineers and Plant Operators who were the first on the ground!

On Saturday 4 January, I was contacted by the 22ER Operations Cell to inform me that a call out was anticipated and that the command group should start preparing. I quickly conducted my own preparations before arriving at the Unit to commence planning. By Sunday we had been informed a call out would occur and so commenced an initial contact of personnel who could deploy the very next day.

To their credit a full Troop of Sappers (30 personnel) confirmed that they were available for a 0730h start on Monday if required. On Sunday afternoon the order came through to commence the call out. Commanders were contacted and the next day the first full Troop of Engineers were conducting their reception, staging, onward movement and integration before

moving to Bairnsdale with a convoy of vehicles and equipment. Four days later another Combat Engineer Troop and Plant Troop arrived. This formed callsign E10 with both Combat Engineer and Construction Engineer capability.

E10 formed part of JTF646.2 which was the Battle Group allocated to the East Gippsland Region and was commanded by 22ER's Commanding Officer, LTCOL Sharon Coates. This area was further split into two areas of control based on the civilian Incident Control Centres (ICC) established to coordinate all bushfire related activities in the region. The Bairnsdale ICC controlled from Bairnsdale to Orbost, and the Orbost ICC controlled from Orbost to Mallacoota. JTF646.2 had the following major sub-units; E10, an Infantry Company, a Motorised Combat Team, a Protected Mobility Vehicle (PMV) Troop, and a Combat Service Support Team. Everyone except for the Mounted Combat Team were Reservists from Victoria and almost every Corps, including a contingent from the Republic of Fiji Military Forces, was represented within JTF646.2. This was truly a combined arms organisation which was far more diverse and complex than many reservists had previously worked with. This made the challenge all the more exciting and rewarding for the soldiers of JTF646.2.

Engineers had a variety of tasks while in the East Gippsland Region; however, the primary role was route clearance. Given our specialised Engineer equipment and skills, we were uniquely positioned to provide direct support to civilian agencies performing route clearance tasks. The route clearance problem was one of the most significant as it was preventing freedom of movement throughout the region. Once a bushfire had swept through an area, the damage caused to surrounding trees could make them unsafe and at risk of collapse. This meant that each and every fire affected road needed to be assessed and clear of hazardous trees before it could be trafficked by vehicles other than firefighting and armoured vehicles. These dangerous roads caused significant disruption in the region as supplies could not be moved by road.

Food, water and fuel were scarce, medical supplies could not be provided, and livestock feed could only be delivered by a limited number of helicopters. Supporting the local agencies in opening the roads became the ADF's main effort and E10 was directly involved in this task for most of the operation, first in the Bairnsdale region and later in the Orbost Region.

Each day Engineer sections would attach to civilian agencies or contractors who were tasked with the assessment and treatment of a particular road. Engineer skills such as chainsaw and tree felling were used extensively throughout the operation. It was fantastic to see the use of civilian skills by our reservists throughout this time. For example, three individuals (two of which were not Sappers but were attached to E10) were arborists in their civilian employment. This highly advanced tree felling qualification enabled them to fell dangerous fire affected trees (known as K-Trees) and was a highly sought-after qualification in the region which directly contributed to the increased pace of route clearance works.

In addition, our Plant Operators were in high demand throughout the operation supporting civilian agency route clearance teams with additional plant machinery to clear obstacles. The progress being made on these routes was clear to see on the maps at the ICC which progressively changed from red, yellow then green as the operation continued. This went on

at an intense daily pace for much of the operation. Our teams began embedding with the same contractor teams daily and each day we improved our efficiency as the civilian agencies and military personnel developed their own procedures for working together.

With major routes being cleared by heavy forestry machinery brought in from around the country, our teams worked on the smaller lateral roads which provided small communities access to critical supplies and infrastructure. Teams worked all over the region, from the bushland of Bairnsdale to the high country near Omeo, to the beaches of Mallacoota, with the engineers serving with the grit, resourcefulness, and humour that only Sappers can.

While route clearance was the main effort, it was not the only support JTF646.2 provided. One afternoon in late January a child went missing while his family was inspecting their fire affected property. When he still had not be found by midnight a combat team was tasked to support the search. Working alongside a Victoria Police, SES, CFA, DEWLP, and local community members, the combat team searched a large area of bushland, ultimately resulting in the safe return of the child to his family.



The Child Search task near Waterholes north of Bairnsdale on Australia Day. The ICP with CAPT Mulholland and SGT Kelly-Grimshaw closest to camera whilst our teams are out conducting area search in very steep fire-blackened country. The 4 y.o. child was found later in the day by another team safe and well.

The breakthrough to the ADF mission was made when the Princes Highway was deemed safe for local vehicles all the way from Bairnsdale to Mallacoota. This enabled road movement throughout the region and signalled the beginning of the drawdown of ADF support to the region. The drawdown of reservists in the area started to occur as most reached one month of deployed service, many of whom had deployed with less than 12 hours' notice to their family and workplaces. E10 gradually reduced its footprint to a troop and then a section. Concurrently, a full-time combat team arrived to continue supporting the community where required.

Reflecting on the experience, it was extremely fulfilling to see the positive effect we had on the local community. From day one driving through a smoke filled, deserted Lakes Entrance, to our final week where the region was teeming with people all of whom were openly thankful and appreciative of the work we were doing.

Sappers truly did lead the way on this operation with our specialist skills and equipment directly supporting civil agencies in their tasks. Despite the intense workload and inevitable frustrations of a diverse and rapidly assembled organisation, this end state and the genuine appreciation of the local community made it a truly satisfying and rewarding experience."

Operation Bushfire Assist: The Alpine Challenge

Captain Andreas Bischof provides his summary of the assistance operation.

"22 Engineer Regiment (22ER) was extremely active throughout the 2019-2020 fire season. It began when members deployed to Queensland in November 2019 and then to NSW in December. It was clear that this would be an extremely challenging fire season.

As Squadron 2IC of 22ER's 105th Construction Squadron (105 CS), my involvement initially included promulgating the availability of our squadron's personnel for DACC (Defence Assistance to the Civil Community) tasks throughout December and January.

In early January 2020, members of 22ER deployed to Simpson Barracks under 4 BDE as part of Army's DACC response. They then moved forward to Traralgon, Bairnsdale, Orbost, Omeo and through to Mallacoota. The majority of this region was designated AO COASTAL within Joint Task Force 646. The responsibility for AO COASTAL was given to JTF 646.2, commanded by CO 22ER, LTCOL Sharon Coates. JTF 646.2 was initially headquartered in Bairnsdale and later in Orbost. I was deployed with more than a dozen members of 22ER to support JTF 646.5 in AO ALPINE in Victoria's high country. We initially staged from Beersheba Barracks in Wangaratta under the command of MAJ Nik Dragojlovic from 5/6 Royal Victoria Regiment. We were assigned to an area bounded by the Ovens River Valley on west and Mt. Beauty on the east.

A move of headquarters had us concentrated in Myrtleford. From here, we staged our operations for the rest of January. Our Engineer Element was further reinforced with personnel from 2CER, 6ESR and 7CSSB. They brought with them fuel trucks, a PMV Ambulance and heavy plant including graders, excavators and bulldozers.

The primary work for Army Engineers in AO ALPINE was hazard reduction tasks. These centred on a 30km stretch of Abbeyards Rd in rugged terrain near Dandongadale, south-west of Mt. Buffalo. This task involved Army chainsaw and plant operators working alongside personnel from the Victorian State Department of Environment, Land, Water and Planning (DELWP) and

Forest Fire Management Victoria (FFMV). Work was at times hampered by weather. Over the Australia Day long weekend heavy rain caused dirt tracks to wash out and blocked culverts, which limited plant and vehicle mobility. There was also the risk that a wind change would affect the fire-front closest to our engineer work teams, potentially sending it their way.

In addition to commanding the Composite Engineer Troop, I was involved in the planning and preparation for ongoing tasking with the JTF 646.5 command team. This included forward planning for a Maintenance Grading Task requested by Harvey Victoria Plantations and DELWP. The task was in support of communities in the mountainous terrain west of Nug Nug, which were threaded by the current and predicted fire-lines.

During our time with JTF 646.5 we detached personnel to the Puckapunyal Military Area to provide reinforcement chainsaw training to personnel from the Republic of Fiji Military Forces (RFMF). This was a great experience for all involved and timely preparation for the RFMF personnel who would later deploy to JTF 646.2 in Orbost for further tasks.

At the start of February, a reduced requirement for engineers within AO ALPINE saw the drawdown of the 22ER element back to Beersheba Barracks in Wangaratta. During this time there was a requirement for engineers to reinforce JTF646.2 in AO COASTAL. So, the majority of 22ER members who had served in JTF6 46.5 moved across the state to Orbost, to join JTF 646.2.

JTF 646.2, still commanded by LTCOL Sharon Coates, was composed of personnel from multiple units within 4 BDE including infantry, cavalry, signals, engineers and ordnance. They were supported by medical and artillery assets from 2DIV, RAAF catering assets and contingents from the RFMF and 8/9 RAR. Of particular use to engineer operations were the 9Regt UAVs



which would prove invaluable in the reconnaissance of hazard reduction tasks, which represented the bulk of work for JTF 646.2.

My role moved from Troop Commander to Watchkeeper within JTF 646.2 in Orbost, East Gippsland. It was shortly after this that routes into Mallacoota were opened. The primary task of the JTF was then to support plant operations for DELWP & FFMV, with personnel also constructing and managing a displaced persons camp.

Another notable task completed by JTF 646.2 was the construction of two Medium Girder Bridges on the roadway to the Buchan Caves Reserve. The wooden supports and footings of the original bridge had been destroyed by fire. These bridges, which would remain in place until May 2020, provided Parks Victoria personnel with access to parts of the reserve that would have otherwise remained unreachable to vehicles. The team which completed this was comprised of personnel from the Republic of Fiji Military Forces (RFMF), the Papua New Guinea Defence Force (PNGDF) and sappers from both 3CER and 22ER who were supported by drivers from 4 CSSB.

Operation Bushfire Assist proved to be a very involved yet rewarding experience for all members, including myself. The opportunity to work with people outside 4 Brigade, from different Service Categories, from different Service Branches and overseas militaries, was an enriching experience. It has made a positive and enduring difference to the sappers of 22ER and the Australian Community."

Operation Bushfire Assist: Mallacoota

Captain Colin Nelson focuses on operations in Mallacoota.

"During Operation Bushfire 2019-2020 (OP BA), I was tasked as the ADF Liaison Officer to Mallacoota. At that time Mallacoota was totally cut-off from the rest of Victoria via land. The ADF's main effort was to meet the logistical and mobility needs of the emergency services in support of their efforts in vicinity of the town. A 4 CSSB lieutenant and eight soldiers had been assigned to me to help coordinate the ADF's response in the area.We were due to fly into Mallacoota by helicopter, but this never occurred due to poor visibility caused by smoke from the bushfires. We instead made a five-hour Victorian Police (VICPOL) boat ride from Paynesville the next day. We arrived as CAPT Scott Houlihan of the HMAS CHOULES was supervising the last boat loads of evacuees off the shore. By that stage approximately 2000 people had been evacuated by the ADF via air and sea. This left approximately 1400 residents and visitors in Mallacoota. As the ranking ADF officer on the ground, I found myself keeping track of all ADF elements in Mallacoota, which fluctuated between 40-80 personnel. This group was comprised of a 4 BDE Civilian Military Cooperation team, RAAF medical personnel, fuel operators, airfield operators, and even the occasional Padre.

Apart from the lack of people, and the large number of abandoned vehicles, Mallacoota appeared relatively normal given its situation. The locals were welcoming of the ADF and

offered us exceptional levels of hospitality. In an effort to maintain a sense of normality, the public bar continued to serve the locals beer, with the bistro serving emergency services personnel with food procured by the Victorian Fisheries Authority.



As a result of the fire, the town had fallen off the main power grid. This meant all of the town's assets requiring power were running off back-up diesel generators. A diesel shortage would have meant no power for the town, which would affect cold food storage, and no fuel for fire trucks or other emergency service vehicles. Even the mobile phone towers and the sewage system pumps were running off diesel generators. In short, the ADF's most immediate and ongoing concern was a lack of fuel. AusNet already had personnel operating a huge diesel generator which kept venues like the pub and supermarkets running, but this asset was thirsty. Without fuel coming in by road, Mallacoota was totally reliant on small batches by Navy and Air Force via sea and air. These were received only occasionally due to no-fly days because of smoke and a stubborn sandbar at the mouth of Bastion Point which reappeared after I'd had it dredged. At one point Mallacoota was only 24 hours away from running out of diesel. However, improving weather conditions and the extraordinary efforts of a handful of ADF personnel kept Mallacoota supplied with fuel.

The townsfolk were also suffering a shortage of unleaded fuel. With no mains power reaching the outskirts, most homes sustained their lights and refrigerators using ULP generators. However, the ADF was able to assist with an air delivery of approximately 4000L of unleaded petrol. According to the Petroleum Warrant Officer who was handling the bulk fuel, the delivery was met with many broad smiles by the recipients.

While fuel was the ADF's main concern in Mallacoota, it was not the sole focus. The ADF was also responsible for manning and operating the Mallacoota airport. This included the organisation of personnel transport in and out of the town via air assets. The ADF also established a RAAF medical centre, supported the Melbourne Fire Brigade's Damage Assessment Teams and even facilitated the delivery of mail.



At one point, the ADF was asked to help the local emergency services deliver essential goods and medical services to outlying towns which had been cut-off by the fires. The risk of tree-fall was very real and VICPOL did not have the means to access these areas safely. Fortunately, a platoon from 7RAR had managed to prove the route from Orbost to Mallacoota in Protected Mobility Vehicles (PMVs). Convoys of two PMVs with RAE chainsaw operators and a medic enabled us to reach outlying towns, deliver the goods and services required and win some hearts and minds in the process.

I was deeply impressed by the professionalism and dedication of all the Defence personnel I worked with through OP BA. Everyone showed initiative and worked hard for the good of the local community. The ADF should be proud of what was achieved in Mallacoota. This is also true for the CFA, SES, MFB, VICPOL and FFMV who all did exceptional work. It was a pleasure to see these civilian and military agencies supporting each other and working together. The opportunity to support these organisations as they supported the people of Mallacoota is an honour many of us will hold on to for years".

A Sapper's Perspective - Sam Pang



Sapper Sam Pang is a Director at the Australian Tax Office

A unique and special perspective of the response and commitment is provided by Sapper Sam Pang

When did you join and Army and why?

"Interesting story, I was 33 at the time, I had been working at my corporate employment for 10 years and was getting a bit bored. One evening as I was waiting for a train to go home, I saw an old gentleman walk off the edge of the train platform. This was during peak hour and there were lots of witnesses, but nobody took any action, it was textbook bystander effect. Anyway, something took a hold of me and I saw that the train was due in 3 minutes, so I just jumped down onto the tracks and tried to lift the gentleman back onto the platform.

When I couldn't manage it by myself, I just started barking orders to people on the platform, "someone come down and grab his legs, someone else reported it to the PTA office upstairs, is there anyone here who is a doctor or a nurse?" It took all of 30 seconds and we had the gentleman back onto the platform and people were attending to a bleeding wound on his forehead.

This incident triggered a yearning for something more adventurous than my daily routine and for opportunities to assist the community. A month or so later, I signed up with the Army Reserves."

What have been some of the key highlights of your Army Reserve career?

'Operation Bushfire Assist was certainly a great opportunity to give back to the community and Exercise Talisman Sabre 19 was a real eye-opener in terms of how a full scaled military exercise is conducted (and the amount of military hardware gathered together at the end on Ex was certainly impressive!).

However, my fondest memories are still of my IETs. The camaraderie I shared with my fellow trainees (especially my fellow SPRs from 22ER) as we learnt the basics of our trade. I often laugh and cringe at how poorly I executed some of our learnings (rope splicing, wow that was a disaster!) and I fondly recall one quip where it was pondered if the Army would ever consider modernising our naming conventions and rename Route Search to its modern equivalent… Tinder. Even the normally stony-faced SGT cracked up at this one."

What is your civilian job? What skills do you bring to Army from this?

"I'm going to flip this question and talk about the transferrable skills I have learnt from Army and applied to my civilian job.

As a Director at the ATO, I lead a project team looking into innovative ways we can use bulk data to identify at risk taxpayers. Put simply, I work with some very smart people to crunch data and produce lots of spreadsheets.

It's the polar opposite of what I do as an Army reservist. Even in this corporate environment I find I default to skills I picked up through my military training, especially around team building and motivation. When I run phone conferences, I would pause and nominate specific people to answer questions to ensure they've all been listening to our discussion. These are small things but they've made a positive contribution to my civilian employment."

How do you manage family, civilian job, army commitments

"As someone with a young family, a full-time job and Army commitments, it is always a difficult juggling act. It often feels like there aren't enough hours in the day to achieve everything and this usually means putting in extra time beyond the daily 9-5.

However, just like a hobby, if you are passionate about something, then the hours you put in no longer feels like a chore and it becomes its own reward.

For me, it's about focusing on the satisfaction I get when I accomplish something with Army, it can be the fun things like putting rounds down range or functioning charges on a demolition range or it may simply be surviving a miserable night manning a gun pit, during a rainy Pukka winter on a Def Ops weekend."

What is the best part of being a Sapper in the Army Reserve?

"It's something so different from my everyday life and so unique amongst my friends and family, it instils in me a sense of pride and accomplishment."

A Sapper's Perspective – Scott Balestra



Sapper Scott Balestra is a Structural Engineer specialising in bridge design

Another Sapper to provide his testimonial and first ßhand experiences was Sapper Scott Balestra.

Scott takes up the story.

When did you join and Army and why?

"I joined the Army Reserves in Nov 2017. In my personal life I love the outdoors and getting my hands dirty either camping, fishing, hunting or hiking. I saw the Army as being able to compliment my lifestyle and learn some new skills. My grandfather was also deployed as a sapper (electrical engineer) in WWII in PNG so trying to follow in his footsteps also had a hand in why I joined."

What have been some of the key highlights of your Army Reserve career?

"Being involved in Operation Bushfire Assist 19-20 is singlehandedly the highlight of my Army Reserve career thus far. Helping the Gippsland and surrounding communities was a great reward this summer after witnessing all their hardships. The country around Eastern Victoria is normally so beautiful, so it was difficult to see it scarred. I helped in assisting route clearing around Bairnsdale, Buchan, Gelantipy, Orbost and Mallacoota. Although some days it felt like we did not achieve much it was sometimes the 3-minute conversation with a local farmer or waving to the kids from the Unimog that made their day as well as everyone involved in the operation."

What is your civilian job? What skills do you bring to Army from this?

"I am a Structural Engineer, currently working on a bridge design for a level crossing removal on the Frankston Train Line. Communication skills are a transferable skill between my civilian and army roles – dealing with architects, contractors, engineers of other disciplines, external stakeholders and drafters require different styles of technical communication. I also have a good appreciation of general Combat Engineering construction methods and techniques from being involved in various types of construction projects around Australia."

How do you manage family, civilian job, Army commitments

"Time management is a hard one to successfully accomplish when trying to mesh family/civilian life/ personal commitments/Army life into a standard week. I am still learning the best way to juggle everything but constantly look to adapt my weeks to fit everything in. Currently I try to forward plan by putting major work milestones, events, birthdays, weekends away with mates and army commitments into my diary then shuffle what can be moved so I can achieve the most things."

What is the best part of being a Sapper in the Army Reserve?

"The diversity of the sapper role is the most attractive part. Being able to draw on search/demolitions/forestry/construction skills keep the training interesting. Additionally, being surrounded by a good bunch of guys and gals from a great cross section of the society provides different mindsets. You could be talking to a 45-year-old police airwing operator, 18-year-old bottle'O attendant or 30-year-old teacher, this is what makes the Reserve life so interesting."



Overall, Victoria had called upon its Sappers who responded with gusto, commitment and pride

Victorian Sappers helped protect Victoria





CHAPTER EIGHT

The Pandemic: An Invisible Enemy and the ring of steel

2020 Operation COVID-19 Assist

In March 2020, the international pandemic of the coronavirus (COVID-19) impacted on Australia. Again, the Defence Force was called out to assist in protecting our country. The CO 22 ER, LTCOL Sharon Coates, wrote in her column in the December edition of Sapper Summit:

"Then came COVID! Late March saw the Regiment start parading remotely to comply with State Government restrictions. Little did we think that we would parade remotely for approximately 8 months. The work done by the SQN staff, from MAJ to LCPL to organise interesting and relevant training that could be done over ADELE (the ADF Browser, not the British Singer) and online meetings was outstanding. They arranged guest lectures through to trivia nights all in the aid of ensuring that our soldiers were engaged."

The much used by-word in the media at the time was "unprecedented". This however, aptly described the crisis facing the Globe. Although somewhat immune from the ravages and death across the globe, Australia still faced the onslaught – particularly in Victoria and Melbourne. The State Premier, Daniel Andrews, imposed strict lockdown protocols that in time, proved to be a world leading strategy but drew much political fallout.

The CO went on to write:

"The Regiment had a number of officers and soldiers involved in OP COVID ASSIST through support to the Department of Health and Human Services (DHHS), watch keepers, LO's and a Decontamination Training Team. Once again, the feedback that I received always reflected the professional nature and 'can do – no job is too big or small' attitude of a Sapper. Our Sappers continue to do us proud."

Normal Victorian Sapper social, commemorative and training activities were either cancelled, modified or postponed due to COVID restrictions. Training slowly returned to "COVID normal" with 105 CS construction block training running in late October and "face to face" parading recommencing in November. The Regiment had a few busy weeks up until mid-December before the "reduced tempo period" conducting the Combative Marksmanship Continuum, Army First Aid training, Tactical Combat Casualty Care training alongside vital preparation for the high-risk weather season.

COVID ASSIST – Unmasked



As recorded in Sapper Summit (December 2020), for many Victorian Sappers, 2020 will go down in history of as "the year of the mask". In January, sappers wore masks while infiltrating the smoky bushfire affected regions of Victoria on Operation Bushfire Assist. A few short months later, many of these same reserve soldiers found themselves donning masks again, on Operation COVID-19 Assist, the ADF's response to the coronavirus pandemic.

For soldiers of 22ER, it had been a remarkable year with minimal training opportunities due to the lockdowns yet conducting two separate ADF operations within our Victorian backyard. Sapper Singh and Sapper Dean are two diggers from 22ER who have ridden the 2020 rollercoaster by serving and helping out where possible. Both were part of OP COVID ASSIST in Victoria spending time working alongside Victorian Police (VICPOL) at Vehicle Check Points (VCPs) on the fringes of the city (the ring of steel) enforcing travel restrictions, and supporting Police on COVID compliance foot patrols in popular public areas in and around Melbourne.

"Working with VICPOL was great," explained SPR Dean. *"VICPOL were happy to have our support, and I felt that having on ADF uniforms standing next to VICPOL helped to soften the Victorian community's attitude towards the imposition of the unusual rules and restrictions people were living under."*

Police Community Patrols

The Police Community Patrols (PCPs) involved VICPOL and ADF personnel teaming up to conduct foot patrols in popular public places such as Docklands, Royal Botanic Gardens and Williamstown. The mission being to ensure the public complied with COVID rules such as mask-wearing, social gatherings and travel restrictions. This gentle approach employed by VICPOL had them interacting with the public in a polite and friendly manner, handing out masks when needed and conducting welfare checks on those sleeping rough to ensure they were healthy and symptom-free.

SPR Singh explains, *"The PCPs were more like community welfare patrols, ensuring everyone was keeping safe, rather than strict compliance checks. We were there providing a positive and reassuring presence alongside the Police. This softer community-orientated approach was a 'good look' for both VICPOL and the ADF."*





Vehicle Check Points

Both Sappers also found themselves on the frontline of Melbourne's infamously named *"ring of steel"*. The VCPs scattered around Melbourne served to monitor public movement and restrict non-essential travel during lockdown. Three eight-hour shifts were employed to keep the VCPs operating 24-hours a day.

"Working the graveyard shift (11PM to 7 AM) at a VCP was taxing," said SPR Dean. *"Some of the nights dragged as people were already under curfew, so nobody was out anyway. At night, you may only check on one or two vehicles per hour."*



According to SPR Singh, the public was receptive and understanding at the VCPs. *"There's no doubt that the VCPs placed an inconvenience on many Victorian's"*, elaborated Singh. *"However, the vast majority of people in the community were understanding, and many also thanked us for our work."*

Lockdown Life

Soldiers on OP COVID -19 ASSIST were still required to follow strict lockdown rules. The ADF housed personnel in hotels in Melbourne's CBD, with each soldier having their own private room, effectively creating social distancing within their living arrangements. Soldiers were only allowed out of their room for three reasons – work, exercise and to collect meals (which then had to be consumed in one's room). Social interaction with other ADF personnel was limited to work only.

Sergeant Warwick Harvey, a long time pay clerk and NCO within Victorian Sapper units, was on the OP COVID ASSIST HQ in charge of looking after finances to support the operation. He recalls, *"paying a lot of money for both the accommodation and transport costs associated with the Ring of Steel!"*

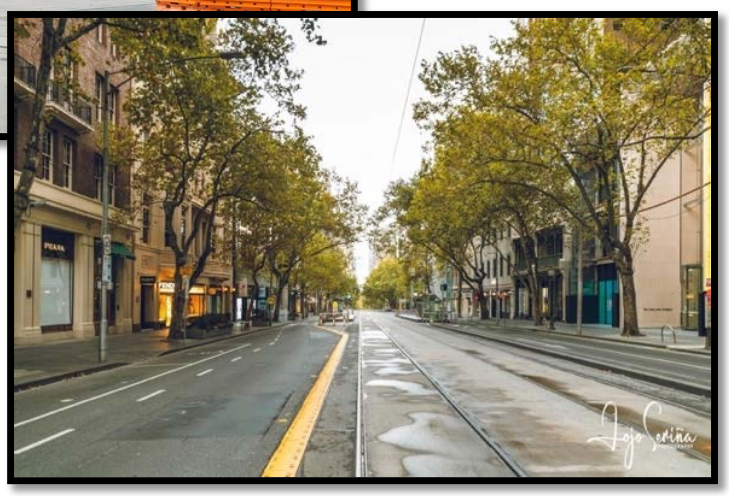
In 2025, Warrant Officer Class Two Warwick Harvey is the Chief Clerk of 22ER.

According to SPR Singh, *"the weirdest part of the OP was not being able to interact much with other diggers. An important and enjoyable aspect of being an Aussie soldier is mateship, camaraderie and chatting with the other diggers during downtime. The necessary lockdown restrictions prevented much of this."*

During OP COVID-19 ASSIST Victorian Sappers provided an unprecedented level of community support. *"When reflecting on 2020, I'll be able to proudly say that I did my part to help out our community*," explained SPR Dean. *"Simply put, my experience involved a green uniform and many, many disposable masks."*



Flinders Street Station, Melbourne is deserted



An empty Collins Street, Melbourne

CHAPTER NINE

2021-2025 Leading up to the Diamond Anniversary

The challenges of the Black Summer bushfire crisis, closely followed by the COVID-19 coronavirus pandemic, created much change to the Australian people's daily lives. The country faced enormous challenges. A grateful nation welcomed its reserve sappers. Their innate skills and experience were greatly appreciated and much needed. They helped prevent further disaster.

Internationally, the Operations Officer of the Regiment, Captain Tarni Preston, deployed to the *"world's most dangerous strip of land"* (SS 109 p. 38) as part of Operation Linesman in the Demilitarised Zone (DMZ) of Korea helping clear the remnants of a long-forgotten conflict (1950-53). This involved a range of tasks including clearance of explosives and the recovery of human remains.



The Regiment had celebrated 70 years since its establishment in 1950 and had now been formally called up in service of the country to fight bushfires. Sir Clive Steele's post WWII concerns were proven correct. The Regiment had demonstrated its combined civil and military skills admirably and with great success in support of the Nation.

This rapid tempo of training and operations undertaken by the Regiment would continue for the Diamond Anniversary of the Regiment in 2025.

2021 Regrouping, rebuilding - then Storm Assist



The new Commanding Officer, Lieutenant Colonel Scott D'Rozario, would command the Regiment for the next three years. Little did he know that the regiment would be soon called upon again.

Having served in the Headquarters of the 4th Brigade during 2019–2020, Scott had closely observed the Regiment's outstanding contributions. With a background as a police officer and a seasoned Reserve engineer officer with multiple operational deployments, he was well-equipped to guide the Regiment through a critical phase of regrouping and rebuilding.

In many ways, this new year presented great challenges for a new command team including the Regimental Sergeant Major, WO1 Mark Everingham, who would later receive an Order of Australia Medal, in part, for his fine work in the Regiment.



Due to the ongoing COVID-19 lockdowns, many planned activities were disrupted. The unit focused its efforts on addressing governance and compliance matters that had accumulated over time.

Despite these constraints, the Regiment continued to support Operation COVID-19 Assist, contributing personnel to Joint Task Group 629.2 across a range of tasks. These included hotel quarantine operations, logistical support to Victoria Police at vehicle checkpoints and border crossings, and the Household Engagement Program (HEP)—working alongside Department of Health Authorised Officers to ensure quarantine compliance. The Regiment also supported Ambulance Victoria by providing drivers who worked in a 1:1 ratio with paramedics. At various points, the Regiment supplied commanders to lead these teams and tasks.

The Regiment was formally called upon in response to severe weather events that impacted over 56,000 Victorian homes on 9 June 2021—some of which remained without power for more than a month.

In support of (what the Regiment called) 'STORM ASSIST 2021', the Regiment rapidly mobilised and prepared a Tri-Service Task Unit, comprising 153 personnel, including 51 members from the Regiment. The Task Unit integrated Navy, Army, and Air Force personnel,

with 22ER taking the lead role in coordinating operations across multiple regions: the Central Highlands (Ballarat), Central and Southwest Gippsland, and the Dandenongs (Yarra Ranges).

During Storm Assist, the Regiment delivered critical mobility and life support capabilities, including:

- Clearing 52 km of access routes
- Removing 336 hazardous trees
- Distributing 179 generators to households without electricity
- Conducting welfare checks and community engagement in partnership with Red Cross Australia, visiting 1,009 households

These efforts provided essential relief to affected communities and demonstrated the Regiment's agility, leadership, and commitment to supporting civil authorities during domestic emergencies.

Earlier in the year, the Regiment had undertaken Infantry Minor Tactics (IMT) training, demolitions training, along with several construction tasks including continued support to the Worawa Aboriginal College and the Engineer Compound at Puckapunyal.

Despite halted face-to-face training and travel across the Eastern Seaboard the Regiment rose to the occasion and were able to develop new and innovative ways to keep engaged with the soldiers. Squadrons conducted lessons via ADELE(U) and the Big Blue Button (computer-based training packages). It was a positive pathway to keep training whilst not exposing the Unit to the risks of COVID-19.

A Medium Girder Bridge was constructed for a special project for Army Office and Combined Arms Breaching Training where unit members had the opportunity to conduct Suppress, Obscure, Secure, Reduce and Assault (SOSRA) Obstacle Breaching Training and All Arms Call for Fire in a joint activity with 2/10 Battery (Artillery) was conducted at Puckapunyal.





91 Forestry Troop (then part of 55 Resources Squadron) had undertaken in 1993 the rebuild of a 1861, 80 Pounder Gun Carriage at Fort Queenscliff. The RAE Association Victoria during the year, in conjunction with a civilian building company *Melcon*, restored a further 64 Pounder and a 23 Pounder cannon that further cemented the relationship between the RAE and Fort Queenscliff.

By now, the Unit History Room at Oakleigh had earnt a venerable reputation as a fine collection of RAE Memorabilia for Victoria.





On Remembrance Day at the Doncaster RSL, the Canine Mascot for Army Engineers in Victoria, Zeus, met the Prime Minister of Australia, Hon Scott Morrison, at a commemorative service supporting the families of two soldiers killed in Afghanistan.

Zeus, the Association's Mascot, was not completely satisfied, he only received one sausage from the PM.

Sadly, Zeus passed away on 8 November 2025 aged 12.



Prime Minister Scott Morrison, Zeus and Don Hughes – 11 November 2021 at Doncaster RSL

On an extremely sad note, 40-year-old Officer Cadet Hamish Goddard passed away at home on 18 March. An extremely capable and admired Corporal with 18 years' service in the Regiment, he was in the process of becoming an officer.

This tragedy was widely felt throughout the Victorian Sapper family.



2022 Floods, Freedom and Indigenous Support

An important milestone for the Regiment occurred in 2022 with the appointment of the first female Officer Commanding of 105th Construction Squadron, Major Astrid Hagqvist, in January 2022.



Major Astrid Hagqvist

A reserve engineer officer, Major Astrid Hagqvist came to the appointment highly experienced with full-time ADF deployment experience in Iraq, PNG and an Aboriginal Community Assistance project.

Astrid also brought highly regarded civilian experience in project engineering to the ADF. This encompassed the planning and delivery of notable multidisciplinary transportation projects such as Melbourne's Suburban Rail Loop, Peninsula Link, various Level Crossing Removals and Melbourne Metro.

Sir Clive Steele had exactly this type of civilian professional engineering experience in mind when suggesting the Supplementary Reserve Scheme in 1950.

Training commenced early in the year with mandatory preparedness training including a Live-fire range activity, fitness and Infantry Minor Tactics. An instructive presentation describing First Nations People involvement with the ADF and the ongoing relationship with Worawa Aboriginal College. This most informative briefing was undertaken by the Principal of Worawa College, Aunty Lois Peeler AM (original member of the Sapphires). Indeed, Sapper Summit articles highlighting this close relationship Victorian Sappers have with our First Nations Peoples (*Serving Country* and *Victoria's First Sappers – A Warrior and Engineering Heritage*) are chronicled in editions 107 (Dec 2022) and 105 (Dec 2021).



The new College and surrounding area

Early in 2022, the Regiment supported the 4th Brigade to mount the Victorian support to the NSW Floods (Op Flood Assist 22-1). This saw the Regiment taking the lead to prepare and lead a contingent (with a number of 22ER members) to support the ADF flood response in vicinity of Lismore NSW.


Initial instructions in the chainsaw course

With a reduction in COVID-19 restrictions, the Unit was able to focus on horizontal works at Worawa College and further vertical and services works around Puckapunyal. Most importantly, as part of the unit's Readiness, a Chainsaw Operator and Basic Tree Felling Course was conducted by the Regiment including inviting other members of the 4th Brigade in April 2022. Lieutenant Cindy Nguyen (winner 2022 Head of Corps RAE Most Outstanding Lieutenant [ARES]) explains how this course, conducted within the Wellsford State Forest timber coupe near Bendigo,

"Expanded soldier's skills, which are essential to maintaining effective mobility and counter-mobility skillsets vital to foundation warfighting, and to assist in the provision of defence assistance in natural disasters." (SS106 p.5) Lieutenant Nguyen also highlighted that,

"Through effective negotiation with the Dja Dja Wurrung People and the Department of Environment, Land, Water and Planning (DELWP) the unit was able to conduct a course away from the standard Defence Training areas we are used to but instead in an environment that is similar to what could be expected during natural disaster response." (SS106 p.5)

Concurrently, the unit continued to provide members for Operation Covid 19 Assist including providing the lead for the Task Unit providing ADF support to Ambulance Victoria.



The Regiment continued to be involved in Brigade level exercises when the people of Victoria called for assistance, yet again. This time (October), the extensive flooding was in Victoria and New South Wales. It was a significant weather event with the largest rainfall ever recorded. Several rivers flooded, Campaspe, Maribyrnong, Avoca, Goulburn, Loddon and Broken with the townships of Seymour, Rochester, Carisbrook, Wedderburn and Charlton ordered to evacuate due to rising flood waters.

The Regiment led the ADF response and proved yet again, that it is a force multiplier in Defence Force Aid to Civil Community (DACC), Responding to these Victorian floods as well as providing support to NSW (Flood-Assist 2022-2).







After four years of fighting fires, covid, storms and floods, the unit turned out in strength to be Granted the Freedom of Entry to the City of Maroondah. A spectacular parade with the Corps Banner flying and march proved to be a fitting capstone to a remarkable couple of years.



The Colonel-in-Chief of the Royal Australian Engineers, Her Majesty, Queen Elizabeth II, had sadly passed away on 8 September 2022. Her reign of 70 years and 214 days is the longest of any British monarch. King Charles III is now our Monarch.





2023 War Fighters

The Regimental Sergeant Major, WO1 Thomas Jesser, was welcomed to the Regiment fresh from a posting at the Royal School of Military Engineering (RSME) in the United Kingdom as the Sergeant Major Bridging. Long-term member of the unit, Captain Noel Tipton, received the first of three Federation Stars for 50 years of service from the Commander of the 4th Brigade, Brigadier Michelle Campbell.

Regimental preparedness for the year was conducted at HMAS Cerberus Naval Base with the focus on progressing training in a foundational warfighting environment. This enabled competency in the unit's primary role but also built capability to respond to other roles if required.

Honing soldier skills with a dismounted activity in March (think Infantry Minor Tactics) was followed by a mobility activity focussing on combined arms obstacle breaching (with support from 4th/19th Prince of Wales Light Horse and their Bushmaster Protected Mobility Vehicles), utilising explosive and mechanical breaching in May. This was a highly successful activity creating much interest throughout the 4th Brigade and creating somewhat of a benchmark for future training.

The tempo for the Regiment continued throughout the year with construction activities including a link road from Bridges Barracks (School of Artillery) to the Weapons Training Simulation System (WTSS), a Lysaught building and horizontal plant operator courses

In October, the Regiment undertook a complex 16-day training exercise that fully engaged both its Construction and Combat Engineering elements.

The Construction Engineering component focused on delivering sustainability effects through a combination of horizontal and vertical construction tasks, while also qualifying additional plant operators to enhance capability. Meanwhile, the Combat Engineering teams concentrated on core operational functions: Counter-Mobility, Survivability and Mobility

The exercise allowed the regiment to conduct defensive operations including developing a comprehensive defensive position featuring Stage 3 pits, simulated minefields, anti-tank ditches, and complex wire obstacles. The exercise culminated in the Regiment transitioning to offensive operations, executing mechanical and explosive breaching of the obstacles and conducting a clearance of an enemy position. This was conducted currently to a visit for the 4th Brigades civilian employers who were able to see the work of the team.

This exercise marked the pinnacle of training under the command of Lieutenant Colonel Scott D'Rozario, showcasing the Regiment's resilience and transformation following the challenges of the COVID-19 period. It was a clear demonstration that the Regiment had re-emerged as a ***Committed, Capable, and Ready force.***

Shooting remained a priority with the 22ER team blitzing the 2023 Skill at Arms Competition.

Various individual support continued to support international priorities, particularly the Southwest Pacific in such places as Vanuatu.



In May 2023, WO2 Scott White of 203 Works Section at 22 Engineer Regiment completed a four month rotation as a Works Supervisor with 19 Chief Engineer Works (19 CE Wks) on the Cook & Tiroas Barracks Redevelopment Project which is part of a strong and enduring security partnership between the Governments of Australia and the Republic of Vanuatu delivering infrastructure for the Vanuatu Mobile Force (VMF).

The project commenced construction in 2021 and is expected to be completed in 2024, with an aim to provide significant economic opportunities for Vanuatu by creating local jobs and maximising local industry and commercial involvement, including the use of local materials, suppliers and service providers, wherever possible.

The project also partners with local training establishments who offer opportunities for the local workforce and VMF members involved in the redevelopment to upskill.

Roads and essential services are also being upgraded to support the new facilities and critical infrastructure works will enable the Vanuatu Government's National Emergency Radio Network (or VGNERN) as part of a joint initiative to upgrade the Vanuatu inter-island emergency network.

Cook Barracks located in Port Vila, Efate, is seeing construction of a new logistics precinct which includes engineer and vehicle workshops, magazine and armoury; entry precinct including a guardhouse, guard hut, chapel and medical centre; accommodation throughout; officers and soldiers messes; training facility; fire station and waste water treatment plant.

Experiences such as this are highly recommended - any soldier, regardless of rank and speciality, should actively pursue opportunity which develops individual skills, contributes to professional mastery and provides tangible capability to the RAE, the Army and the wider ADF.



Cook Barracks – Port Villa, Vanuatu



Project Team at Cook Barracks, Port Vila, March 2023 (WO2's Cronin, White & CAPT Farragher) ...





New three-bedroom Married Quarters under construction…

2024 Tenth Anniversary of Amalgamation

In 2024 the Victorian sapper community celebrated the Tenth Anniversary of the amalgamation of the 4th Combat Engineer regiment and 22nd Construction Regiment. They became the 22nd Engineer Regiment. The Sapper tree, planted at the Melbourne Shrine of Remembrance was blessed to commemorate this milestone year. 2024 was also the Tenth Anniversary of the RAE Association of Victoria. They had amalgamated from several previous sapper organisations. This written history is one of their many projects.





Within a busy decade, Victoria's only engineer unit had consolidated an enviable reputation throughout the ADF. Not only being available as a viable force multiplier for the Australian Army, but also as a great asset for defence aid to the civil community. The unit was also a great contributor with the provision of individuals and specialist teams to numerous national defence priorities, both at home and abroad

Assuming command in 2024, Lieutenant Colonel Russell Collins brought a wealth of previous full and part time military engineering experience to the Regiment. With an honours degree in civil engineering, a master's degree in project management coupled with extensive experience within the Australian Aviation Industry, Lieutenant Colonel Collins epitomised the thrust of Sir Clive Steele's desire to have available to the ADF highly qualified and experienced professionals.



In line with the Army Reserves realignment to defence of the Australian north, the emphasis on homeland defence was the focus for EX PLATYPUS SURVIVES in July. Involving both land combat training along with construction tasks.



Lieutenant Colonel Russell Collins

The Sir Clive Steele Memorial lectures this year highlighted the diversity of sapper influence around the globe.

Sapper Scotty Balestra, a structural engineer in civilian life, brought alive his hands on experience of constructing a pedestrian foot bridge in the now thriving Rwanda close to the former massacre site at Kibeho in Rwanda in 1995. Captain Emily Mirabella facilitated a pre-recorded lecture from overseas, outlining her recent Army Headquarters sponsored trip to Singapore and Borneo to study the Southwest Pacific campaign during WW11.

In January, in the middle of an Austrian Winter, Sapper Yutian Fang participated in the British Armed Forces inter-services skiing and snowboarding international challenge EX ALPINE CHALLENGE. Sappers of all ranks and trades are encouraged to participate in the full range of sporting endeavours.

Completing Command and Staff College this year was Major Ben Healy and Major Astrid Hagqvist. Of note, Major Hasqvist was awarded the Chief of Army Prize for best overall result in attaining the psc (passed staff college) qualification.



SPR Fang Snowboarding

2025 Diamond Anniversary

Consolidating and enhancing unit and individual skills for EX TALISMAN SABRE 2025 was the focus for the year's training.

2025 presented significant challenges and opportunities for the members of the 22nd Engineer Regiment, marked by numerous combined arms activities and internally conducted courses. The year commenced with several personnel returning from Rifle Company Butterworth (RCB), others deploying on Transit Security Element, and CAPT Michael Plant participating in an Army History Unit staff visit to Borneo.

In April, the Regiment contributed to the JTG 629.2 exercise EX ARRAS FLASH in Sale, Victoria. Sappers from 22ER executed a range of tasks including cordon and search operations, dismounted and mounted patrols, vehicle checkpoints (VCP), vital asset protection, and urban assaults. The team also collaborated with local law enforcement in the clearance of unoccupied buildings.

In June, the Operations Cell delivered a destruction of malfunctioned explosive ordnance (DMEO) course at Dutson Bombing Range, RAAF Sale, for soldiers from 8/7 RVR, 5/6 RVR,12/40 RTR and 4/19 PWLH. This has now qualified members throughout the 4th Brigade to safely dispose of misfires and unexploded ordnance (UXO).



22 ER carrying out explosives training at Puckapunyal

This year saw Brigadier Michelle McCormack, a former CO of the Regiment, assume command of the 4th Brigade whilst WO1 Clinton Matheson, with a strong background as a Bomb Disposal technician, joined the Regiment as the Regimental Sergeant Major.

The major focus for the year was TALISMAN SABRE 2025 where over 17 nations from around the globe participated.

In July members from 8 and 10 Combat Engineer Squadrons deployed on EX TALISMAN SABRE in Darwin. Activities included snap VCPs, area searches, vital asset protection and hardening, breaching operations, post-blast incident drills, and camp construction. The exercise culminated at the newly commissioned Enhanced Urban Operations Training Facility (EUOTF).



Also in July, the Regiment Training Troop conducted a five-day Field Craft and Battle Craft course at Puckapunyal Military Area (PMA) for ab initio trainees from 22ER, 8 OSU, 2/10 Battery, and 108 Signal SQN. The course entailed big challenges for the trainees with several of them having never slept in a field environment. Four days of intense rain made it even more interesting. This course successfully qualified 24 trainees throughout the 2nd Australian Division.

In August, 22ER hosted its annual Section Competition, featuring multiple sections competing in a series of demanding activities. These included a BFA race, a falling plate shoot on the PMA classification range, tactical navigation legs, search lanes utilizing the FLAIM system, and demolitions fault-finding tasks. After a closely contested event, 6 Section, 2 Troop, 8 CE SQN, led by CPL Benjamin McFadyen, emerged as the winners.

October involved participation in the Brigade-level exercise EX ARRAS WALKS, which spanned locations across Victoria, including PMA and the Greater Bendigo Shire. 8 and 10 CE Squadrons conducted search operations and provided engineering advice to SRTU 8/7 RVR. 105 Construction Squadron delivered construction capability and field engineering support to the SRTU HQ. This exercise offered an excellent opportunity to collaborate with 4th Brigade counterparts and deliver mobility, survivability, and specialist engineering effects



From left LTCOL Jason Eltham, Don Hughes, LTCOL Russell Collins

December was marked by preparations for the stand-down period, the Commanding Officer's Handover-Takeover parade and bringing ESF 22ER online. After two years of leadership, Lieutenant Colonel Russell Collins handed over command of the Regiment to Lieutenant Colonel Jason Eltham during a formal parade at Oakleigh Barracks. The parade coincided with a unit family day

22nd Engineer Regiment remains committed, capable and ready to serve the nation for the next 75 years.

Annual Victorian Sapper Functions

The Kapooka Tragedy Commemorative Service

On 21st May 2025 the 80th Anniversary of the Kapooka Tragedy was commemorated. A large contingent of sappers from around the country attended. Corporal Trevor Mays, who had been involved along with the Regiment in the construction of the memorial, ensures the Regiment is well represented each year.

The Royal Australian Engineers Association of Victoria have a contingent that also make the annual trek to Kapooka to remember the Tragedy.



LTCOL Don Hughes, President of the RAE Association of Victoria, Zeus, Canine Mascot of the RAE Association of Victoria, COL Roger Mc Murray, Acting Head of Corps, Mr Peter (Jock) Fallon, Curator of the Memorial Garden at Heidelberg Repatriation Hospital and the team from 22ER

Victorian Aboriginal Remembrance Day Service

Each year at the Melbourne Shrine of Remembrance the Victorian Aboriginal Remembrance Service is conducted to pay tribute to the vital contributions Aboriginal and Torres Strait Islander service personnel have made, and continue to make, to the Australian Defence Force in times of conflict and peace. First Nations service men and women have served in every conflict since the Boer War.



Shannon Garrett, a Sapper on a Mission

Victorian sappers rallied around Shannon Garrett, a serving member of the RAE who had been diagnosed with a life-threatening disease called “Diffuse Midline Glioma” (DMG). The 1000 Steps leading to One Tree Hill in the Dandenong’s was the site of a rugged and challenging course to help raise much needed funds for research into this disease.

On a sad note, Shannon lost his heroic fight against this disease on 2 March 2026 at the age of just 53 years**. *Lest We Forget***





Royal Children's Hospital Good Friday Appeal

Victorian sappers have consistently supported the Royal Children Hospital (RCH) Good Friday Appeal (GFA) since 1988. Initiated by Corporal Eric (Jock) Howatt, in recognition of the passing of his son Adam, the Regiment continues this wonderful activity each year to ensure our children receive the best medical and hospital care possible.





Eric (Jock) Howatt with his Corps Commendation Certificate for the wonderful work he is doing. Pictured with his wife Joanne and son Neil.

Skill at Arms Competition

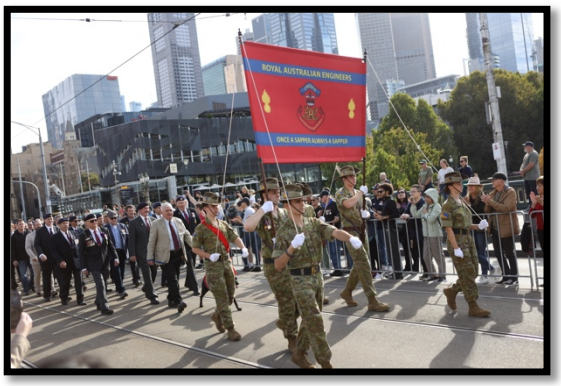
At the 4th Brigade Skill at Arms competition conducted in December 2023, the unit team commanded by Corporal Harrison King, was presented the Brigade Shield for the highest team score, adding themselves to the list of victors dating back to 1890.



Skill at Arms winners 2023



Melbourne ANZAC Day March









22 Engineer Regiment, The Royal Australian Engineers Association of Vic and 91 Forestry Squadron visit the Shrine of Remembrance annually on ANZAC Day after a march from the city followed by a gathering at the Elephant and Wheelbarrow pub in the city.

Sapper Muster

In March each year we gather to enjoy a social evening with a meal and few drinks to relive our time in the units. These are well attended. There are also two Christmas functions, one held in the Latrobe Valley for our Valley Sappers and one at Croydon RSL.







Royal Australian Engineers Association of Victoria (Inc)

ANNUAL SAPPER MUSTER 2025

Welcome fellow Sappers and friends.

ASSOCIATION ACTIVITIES FOR 2025;

For Updates, FOLLOW US ON FACEBOOK - *RAE Association Victoria*

MARCH

1st ANNUAL SAPPER MUSTER
Oakleigh Barracks
1 - 31st MARCH ON CHALLENGE for SOLDIER ON

APRIL

18th ROYAL CHILDREN'S HOSPITAL GOOD FRIDAY APPEAL
10th ANNUAL GENERAL MEETING
20th RINGWOOD RSL ANZAC MARCH
25th ANZAC DAY MARCH and LUNCH
Elephant and Wheelbarrow Hotel

MAY

21st KAPOOKA TRAGEDY COMMEMORATION

JUNE

(TBA) WATERLOO DINNER
28th RAE CORPS BIRTHDAY LUNCH
Upwey/Belgrave RSL

JULY

1st ROYAL AUSTRALIAN ENGINEERS CORPS BIRTHDAY
7th RESERVE FORCES DAY
Shrine of Remembrance

To Join or Renew your membership, please scan here

The Royal Australian Engineers Association (Vic) would like to thank the following sponsors for their kind donations toward the Raffle tonight;

Stewart (Ace) Williams a former member of 4 CER and a resident of Cairns. Even though separated by a large distance Ace has been a wonderful supporter of the Association and has again generously donated funds towards the raffle prizes.

NOTE
This placemat is provided to you for your convenience to reference activities that the Association manages throughout the year. Your support in these activities is encouraged.

SEPTEMBER

14th AUSTRALIAN PEACEKEEPERS DAY

OCTOBER

3rd LATROBE VALLEY RAE MUSTER
Newborough Training Depot
(TBA) SIR CLIVE STEELE LECTURE
(TBA) ROYAL AUSTRALIAN ENGINEER GOLF DAY AT ROYAL MELBOURNE

NOVEMBER

(TBA) ROYAL AUSTRALIAN ENGINEER CORPS CONFERENCE
11th REMEMBRANCE DAY WREATH LAYING SERVICES
15th VICTORIAN VOLUNTEER CORPS OF ENGINEERS FOUNDED 1860

DECEMBER

(TBA) END OF YEAR PARADE:
22 ENGINEER REGIMENT
5th END OF YEAR CHRISTMAS FUNCTION
Croydon RSL
4th ST BARBARA'S DAY
The Patron Saint of the Engineers

CHAPTER TEN

Reflecting on the Past

A solid foundation upon which to build the future!

An understanding and appreciation of the past can be a vital ingredient in navigating a pathway forward. Sappers have always pioneered new techniques and ideas able to tackle challenges confronting them but always remember the past. Sometimes, a bit of luck is also involved. Often though, diligence and hard work is what builds a solid foundation for the future.

The Luck of the Draw

(Why we have only 105 CS, 203 Wks Sect and RHQ 22ER remaining - Bruce Campbell reflects)

When 22 Construction Regiment was formed in 1950, it included RHQ and 104 Sqn sponsored by CRB, 105 Sqn sponsored by SR&WSC, 106 Sqn by MMBW and 107 Sqn as a joint function of CRB and SR&WSC. 107 Sqn spent much of its early history as a holding unit for members of the other 3 Squadrons who for reasons such as civilian work commitments or promotion training courses were for some time unable to attend their normal unit training.

For at least the first 4 decades RHQ effectively held the original 4 squadrons, or in some times what remained of them, together. Of the 4 Squadrons, 104 in the early years was the largest, and briefly, in the mid-1950s, 105 Sqn was the smallest, but as a result of effective recruiting campaigns, first in the late 1950s and then particularly 1965 when 105 Sqn, with tremendous support from the Commission gained 65 recruits in a week. 105 Sqn then became and remained the largest Squadron in the Regiment.

Meantime, throughout the 1960s until the 1990s, the other 3 squadrons all faced problems of some sort and 105 Sqn seemed to be favoured - possibly by good fortune at critical times. Eventually other units were absorbed into 105 Sqn or simply wound up and so we are left with just 105 Sqn. It has remained active to enjoy its 70th birthday. RHQ also remained active and 22 ER is the only RAE Regt to be able to celebrate 70 years. 22 ER should also be commended on its longevity and great performance over that time.

Looking back, Bruce Campbell lamented:

"I sometimes think that we were blessed by the support of Maj. Gen. K D (Ken) Green CB, OBE, ED, MID who in his civilian life, was an engineer with, and later became a commissioner of, the SR&WSC, before becoming Secretary to the Premiers Department - Victoria's senior Public Servant. Ken Green served as a Captain and 2IC of the famous 15th Australian Field Company

in PNG 1942-45. On his return to civilian employment after WW2 he served in various RAE units based at Ringwood and eventually became the last serving commander of Victoria's 3rd Division prior to its disbandment.

After his retirement he also served some time as our Colonel Commandant. As a Commissioner of the SR&WSC he took great interest in 105 Sqn and provided tremendous support to the unit in its most successful recruiting campaign. This resulted in the enlistment of 65 recruits in the one-week campaign, which meant that from then on 105 Sqn was always the largest Squadron in 22 Regt.

Ken Green was also the Patron of the first Victorian RAE Association that formed in 1979 at Ringwood. He and the Commission's chairman, Mr Alf Tisdale, also assisted in persuading the Army to conduct a special Officer Training course over a period of 12 months which resulted in 22 Regt gaining 12 new Lieutenants in 1966.

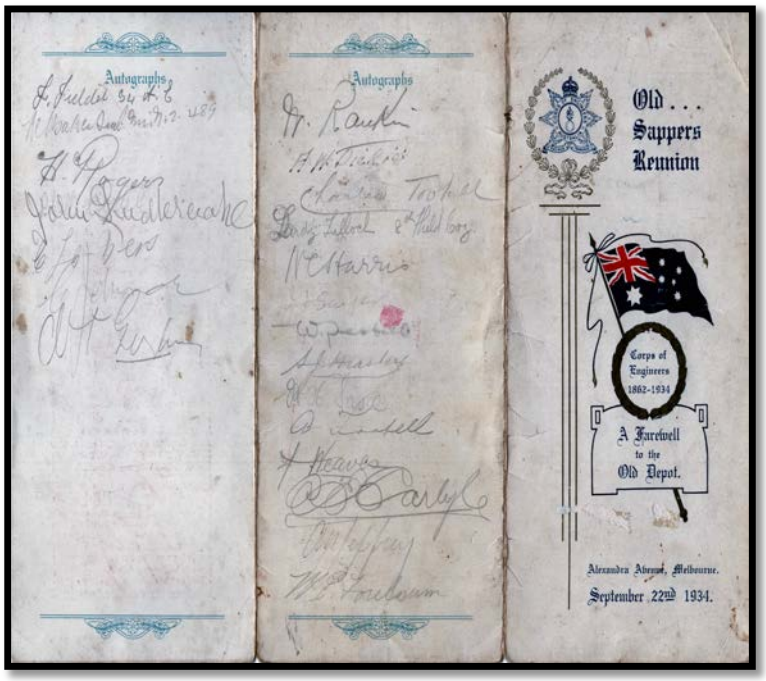
I may be wrong but I am convinced that, it was as a result of his interest and promotion that 22 Regt was chosen as the first SR unit in Australia to be allowed to provide RAE troops for service overseas post WW2 when 80 members of 22 Regt were deployed to Wewak, PNG, in January 1963, to replace members of 21 Const Sqn, who returned to Australia on leave."

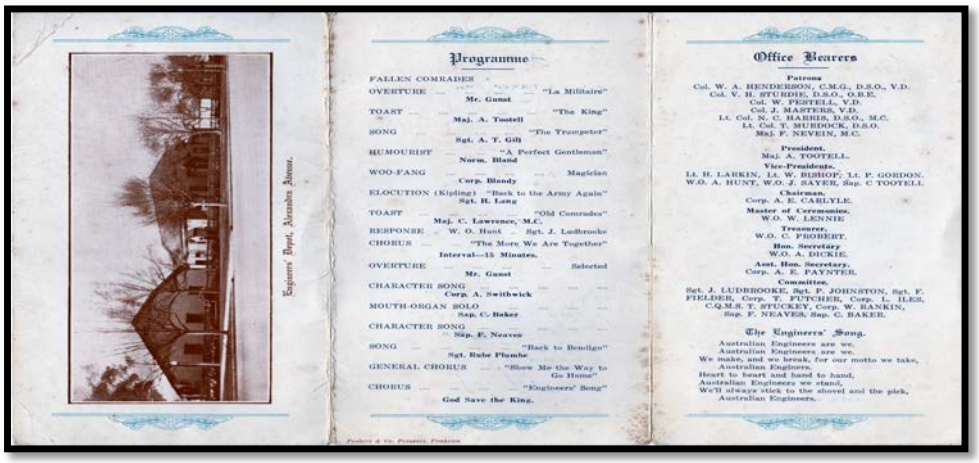


Papua New Guinea 1963

The Associations – 1906-1934 Early Ex-Sapper Gatherings

As early as 1906, according to Captain O. Gluyas, there was an active group of old Sappers, ex-servicemen of World War 1 and some even earlier that met at the Alexandra Avenue Depot and had regular meetings and reunions with permission from the Depot Command. Some early members were A. E. Carlyle, F. Nicholls, O.Gluyas, C. Probert, A. Dickie, S. Painter, R. Hutchison, H. Rogers, F. Fielder, W. Rankin, R Smithwick, H. Larkin, J. Lawlor.





The Corps of Engineers had enjoyed permissive occupancy of their old depot in Alexandra Avenue on the South bank of the Yarra since 1894, thus it was time surely that this choice site was vacated, some of the wooden buildings demolished and the area restored to the citizens of Melbourne. As a Grand Finale they organised an Old Sappers Reunion as a “Farewell to the Old Depot” that was held at the depot on 22 September 1934. Under the Patronage of seven senior Officers of the Corps, it was a huge success.

1934 – 2014 The Old Sappers Association

In 1934 the brand-new red brick Army Engineer Training Depot at Swan Street, Richmond was ready for occupation and the units moved in. During that year an Association was formed and in 1935, the constitution was drawn up for the Old Sappers Association in the combined Sergeants Mess which they were allowed to use for their monthly meetings. This was in an honorary capacity, courtesy of the Commanding Officers at the new depot. A. E. Carlyle was elected the first President, W.O.C. Probert Treasurer and W.O.A. Dickie Hon. Secretary

The units at the Depot at the time were; 3rd Division Engineers, Major C. Lawrance MC, 4th Division Engineers, Lt Col R. Simpson, 2nd Field Squadron and 34th Fortress Coy, Major Robinson.

At the Association meetings all members have the same and highly prized rank of "Sapper" and are so addressed. During the busy years to follow with the C.M.F. at the Swan Street Depot, the Association was well received and respected. The members of the Combined Sergeants Mess for all Engineer Units and Permanent Army Staff at the depot were able to enjoy the Old Sappers activities in particular their Waterloo Nights.



A framed photograph of the President, Sapper Carlyle was presented to him at the Christmas meeting on 11 December 1937 to recognize his many years of service to the Association

1939-1949 Outbreak of Hostilities

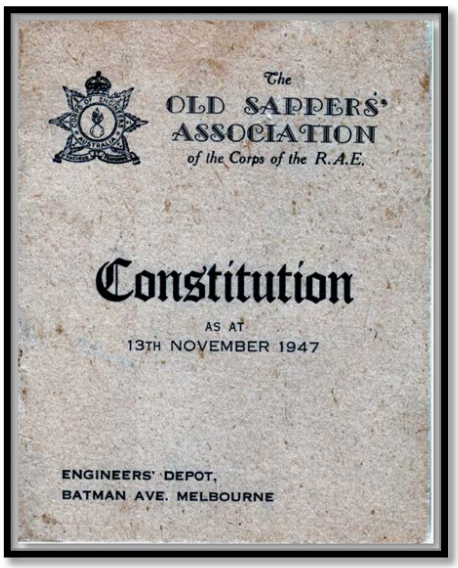
Some action was imperative regarding the assets left by the Combined Sergeants Mess at the Swan Street Depot. By telephone from Seymour Camp, the Mess President, WO W. Clarke and the Secretary, Sgt M. Beck requested A. Carlyle, President of the Old Sappers Association to collect the assets and arrange storage during the wartime disbandment of the Mess. So for the duration the piano, billiard table, lounge suite, tables, chairs, glass and chinaware, etc were stored in the homes of the Old Sappers.

With the outbreak of hostilities on 3 September 1939 and the world was to become another Armageddon in a little more than two decades, all the Engineer units were mustered in camps, and at their war stations at Port Phillip Heads in the case of the Fortress Engineers.

Spr A. Carlyle fabricated canisters in his sheetmetal workshops for the safe keeping of carpets and banners. Spr O. Gluyas acted as custodian of the funds and was co-trustee with Spr C. Probert.

During the grim war years, the Old Sappers Association held some meetings in the Officers Mess. At times it seemed useless to continue and the Association almost lapsed. Following the cessation of war activities, the President, Spr A. Carlyle set about the revival of the Association. Tall, broad with a heart to match Albert Carlyle was affectionately known as “tiny”. His public service was impressive for he was a J.P. and served as a Melbourne City Councilor for the years 1947 - 1955, Heidelberg councilor 1940 - 1947 then 1951 - 1957 also as Mayor for 1946/7 and 1956/7. He was awarded the M.B.E in the Queen’s Honours in June 1958. In 1947, realizing that new blood was required he obtained the services of Maurice Beck.

Spr M. Beck drew up a new constitution which was adopted at the General Meeting on 3 November 1947, the annual subscription being five shillings and persons eligible for membership were those who had served in the Corps of Engineers prior to and including August 1945.





Old Sappers Association marching on ANZAC Day

Provision was made for three Trustees. The granting of Life Memberships was commenced in 1947 on the basis of one per annum. The first Life member was the President Spr Albert "Tiny" Carlyle who had served the Association so well. In the early postwar period, many Associations were formed by members of wartime Engineer units. The passing of time and the problems encountered on "Civystreet" made continuance rather difficult. The Fortress Engineer Association, formed in 1945, had flourished but by early 1949 a merger with the Old Sappers Association was considered advisable.

The President, Major W. Botham and Secretary Captain L. Wilson were directed to explore the possibility of an amalgamation with the assistance of Old Sapper and former Fortress Engineer, Captain "Jack Lawlor". After two committee meetings on 24 March 1949 and 29 April 1949 a Special General Meeting was held on 27 May 1949 of the Fortress Engineers where it was agreed merger with the Old Sappers Association subject to their support of the annual commemoration of "Lark" Force who died in New Britain or at sea in the prison ship "Montevideo Maru" off Luzon, June 1942.

By the merger, the Old Sappers Association had doubled its membership with the younger men of World War II it also meant that there was a one hundred percent increase in funds, a real "shot in the arm" just when it was needed. Their next meeting in June 1949 was the annual Waterloo night, a happy event with the new members.

The second life member, elected in 1948, was Sapper "Alf" Dickie who had given good service as Secretary. In 1949, the third recipient was Sapper Harry Larkin, a fine soldier and Captain/Adjutant of the Fortress Engineers at the old and new depots. It is interesting to note that his elder son George, was a Duntroon graduate. His younger son, Bill was a Lieutenant with the Rabaul Fortress Coy, "Lark" Force in 1941/42.

1950 Post War – The year the Supplementary Reserve was Raised

On 9 November 1950 the Annual meeting was held. Spr A. Carlyle in the chair, Sappers R. Hutchison and H. Wright Vice Presidents.
Former Fortress Engineers elected to the committee were Sapper L. King Treasurer, Sapper R.Knight Assistant Secretary to Secretary M. Beck, Sapper W. Both committee man with Sappers F. Nicholls and P. Vaughan who had served with the Royal Engineers.
The membership was now at 113 members. Sapper "Ossie Gluyas, a trustee since early years was elected Life member number four.

In August 1951 the assistance of the Association was sought on behalf of the National Service Trainees, then in camp. A Challenge Cup and Hut pennant was donated for the competition. In November a dance for the N.S.T.'s was arranged by the Association at the depot.



Old Sappers Association Challenge Cup
National Service Trainees Engineer Group - Presented for Inter Platoon Competition

31 October 1951 saw the seventeenth annual report being presented showing a very full year of activities, keeping the Association very busy. Membership was 143 members and Sapper W. Rankin, was elected Life member number five.

1952 – 1953 The Honour Continues

The eighteenth annual general meeting on 13 November 1952 followed a most successful year and was held in the Sergeants Mess. Sapper A Carlyle was in the chair and an attendance of 80 members. Membership was now at 202. Office bearers as per last year but with additional committee men Sappers A. Nitz and G. Dewhurst.
Honorariums approved for the Secretary and Treasurer were 10 guineas and five pounds respectively. A collection for the Korean Force Christmas fund realized eight pounds.
On December 12, the Christmas Social Evening held in the Sergeants Mess was attended by 95 members and six guests. Niners of ale were donated by the Association.

The C.R.E., Lt. Col. J. Needham presented Sapper H. "Ham" Rogers with Life membership number six and then gave a resume of the history of the Corps about the time of Ham's enlistment in 1885. Sapper Rogers responded with particulars of his service and displayed Corps badges worn before Federation.

For entertainment members of the Old Sappers staged a hilarious four act play "Cinderella" in costume which was well received.
The main hall of the Engineer Depot was the venue for the children Christmas Treat on 13 December, the attendance being 133 children and 150 adults. Spr Carlyle donated the Christmas Tree and the entertainer was Mr. Wells, conjurer. Father Christmas arrived and distributed the toys after which refreshments were enjoyed by all. This excellent affair was a forerunner for the yearly parties held since, thanks to the Ladies, the Management Committee and assisting members. Monthly meetings with some forms of entertainment were held in the Sgt's Mess during the year.
At the May meeting, Mr. W. Uren of the Olympic Games committee gave a talk on the games at Helsinki, 1952. A talk by Mr. E. Tanner about the 1948 Olympics was followed by a screening of a 1948 Games film.

In 1953 the Association increased its strength by an amalgamation with all financial members of the 11th Workshop and Parks Association.

This Autumn the Old Sappers Association undertook the rather daunting but commendable task of providing working bees for maintenance work on Blamey House, Black Rock. By 24 May, four full Sundays had been occupied. Legacy kindly provided the meals.

12 June was Waterloo Night the attendance being 79 members and 3 guests. Spr A. E. Carlyle was in the chair. Entertainment came from members present. Official guest, Mr. J. Cooper of Legacy thanked the Association for the work done at Blamey House.

The Shrine pilgrimage was conducted on 28 June and supported by the 2/22 Bn. Association, the Northcote Corps Salvation Army Band and Mr. Alf Foletta was the Bugler. Mr. E. "Ted" Best, 2/22 Bn. gave the address.
It is interesting to recall that Ted was Lord Mayor of Melbourne 1970 - 1971. During the term of his office, he and his wife welcomed the Queen to our city during the Royal Visit and

accompanied the Queen, Prince Philip, Prince Charles and Princess Anne during their free and easy stroll among crowds assembled in Collins St



Queen Elizabeth II visits Melbourne May 1970

Two more working Sundays virtually completed the project at Blamey House, Black Rock. On the last day, 2 August, an impromptu party was held, Legacy and Spr "Tiny" Carlyle supplying the liquid refreshments. Mr. Gallagher of Legacy thanked the Association and "The Age" of 3 August published particulars of the work with photographs of the assembly.
On 18 August at the Engineer Depot, 70 National Service trainees were welcomed into the Corps and entertained by the Association. The first Ladies social night was held on 24 October and enjoyed by 42 members and their ladies in the Sergeant's mess. This was a successful and progressive step by the Association. There is not the slightest doubt that our continued success over the years has been due in no small measure to the support given by the ladies.

A weekend coach trip to Queenscliff late October completed the activities for the year. The accommodation was at the Queenscliff Hotel. On Saturday Old Sapper Jack Lawlor, resident of Queenscliff arranged a pleasant afternoon at the Bowling Club. An inspection of the Queenscliff Fort area was made on Sunday morning followed by a visit to Point Lonsdale and a view of the rip from the elevated lookout of the lighthouse.

1954 – 1955 A Clay Bird Shoot – Old Sappers Association

The year commenced with the Nineteenth Annual General Meeting held in the Sergeants Mess on 12 November with Sapper A. Carlyle in the chair and an attendance of 80 members. New Office bearers were Treasurer Spr. Nagle, Committeemen were; Sappers J. Kerr, F. Chambers and J. Nagle.

A clay bird shoot was conducted on 14 November for members and their families on the Sloan's property at High Street Road, Mount Waverly and was as usual, very enjoyable.

On 1 December, 62 National Service Trainees were welcomed to the Corps of Engineers at the depot by the Old Sappers Association. The C.R.E Lt. Col. J. Needham, OBE outlined the traditions of the Corps to the trainees. Sappers Ham Rodgers, A. Dickie and R. Knight spoke briefly after which the Association provided supper for all attending.

The Christmas Social Evening on 11 December was attended by 86 members. The President A. Carlyle presented Vice President Sapper Bob Hutchinson with Life Membership badge number 7 and thanked him for his service to the Old Sappers Association since its inauguration. Sapper L. King was the recipient of a presentation in appreciation of his industry as Treasurer for the previous two years.

A record attendance of 170 children and 150 adults attended the Children's Christmas Treat at the Main Hall of the Engineer Depot on 12 December. The entertainer, Mr Hal Roy gave an exhibition of trick cycling. Father Christmas distributed toys, not an easy task on a warm December afternoon. Refreshments for all followed and so a happy family gathering ended, a credit to the Committee and assisting ladies and members.

The monthly meetings from January to May 1954 had fair attendances. The entertainment varied from miniature rifle range shoot, films about Antarctica to an interesting talk by well-known cricket umpire Mr. R. Hele.

The Waterloo Night meeting in the Main Hall of the depot on 11 June was attended by 67 members and one guest.

A conducted tour of the Australian Paper mills in Alphington on 15 June was appreciated by the members.

The Shrine Pilgrimage was conducted on 27 June and assisted by the Northcote Corps Salvation Army Band. The address was given by Old Sapper, Major W. G. Botham. DCM

In August, with the CRE Lt Col K. Green present, the Engineer intake of National Service Trainees was welcomed by the Old Sappers.

At the twentieth Annual General meeting on 11 November, Sapper “Ray” Knight was elected Secretary and so began his long term as such. New Committeemen were Sappers W. Sibley and J. Kerr.
With the CRE Lt Col K. Green present, 82 N. S. Trainees were welcomed by the O.S.A. at the Depot. The Christmas Social night on 10 December was a notable affair with an attendance of 100.
The official guests were Maj Gen Sir Clive Steele, Col P. Jackson, Lt Col K. Green and Major Tanner. Sir Clive thanked the OSA for the invitation. He expressed his satisfaction with progress of their work for NS Trainees.
Spr C. Probert was presented with Life membership badge number eight by Sir Clive.
The Christmas Treat at the Engineer Depot on 12 December had the bumper attendance of 180 children and 200 adults. Peter Leonard entertained with his puppets.

A New Year’s Eve Ball was held at the depot and even though the attendance numbers were low an enjoyable evening was had by all. A trick cyclist was entertainment along with an orchestra followed by an excellent supper. Auld Lang Syne at midnight with plenty of balloons and streamers.

1955 – 1956 Old Sappers Association War Time Building

In January 1955, the Old Sappers Association was allocated one of the war time buildings in the depot area for their use. This noteworthy act provided a stimulus to the Association from which it had never looked back.
For an official opening at the March meeting, working bees toiled during February repairing and sanding the floor, decorating the interior walls, etc. To provide a working fund Spr Vaughan made an interest free loan of 50 pounds. Similarly, Sapper King made 22 pounds available for equipment Note; these amounts in 1955 would have been considered quite appreciable. Sapper Sibley, a master painter, donated the paints to decorate the hall. Further donations from members amounted to 20 pounds. (Tradesmen in 1955 earned roughly 15-16 pounds per week)

The committee decided to make a Special Effort Appeal at monthly meetings to increase Association funds. The OR’s of the Regular Army at the Depot could become affiliated members of the Old Sappers Association at a nominal sum, with the use of the hall at any time.

The attendance at the meeting on 8 March was 83 members and 4 guests. The CE Col P. Jackson, officially declared the new rooms open and congratulated the members on the decorating and furnishing of the hall. Col Jackson stated that our work for the National Service Trainees was well known in official circles. Col K. Green CRE, handed the keys to the hall to L/Cpl G. Carr, Army representative of the O.S.A. at the depot. Major Knight, 6 Engineer Group, responded for the visitors.

The committee resolved to open the hall for members and visitors on ANZAC Day with adequate provision of light refreshments during the day. This open house each ANZAC Day had been a feature of the service to the Corps by the OSA.

In the new quarters the Old Sappers were now able to enjoy film nights or other entertainment at their monthly meetings. A welcome to the Corps, at the Depot was given to 80 NST's in April and a further 110 in August. Refreshments were provided by the Association and the short welcoming addresses were given by Sappers Botham and Nicholls.

A minute of the meeting on 9 August reads as follows; "The members adjourned for 5 minutes in respect of our Patron the Late Sir Clive Steele, Major General and Engineer-in-Chief World War 2". Vale: Chief Sapper Clive Steel.

Showing great initiative, the Management Committee staged the first Cabaret Ball at the Depot on Derby Eve, 28 October. With excellent organization and a great deal of hard work it was a resounding success reflecting great credit on Sapper Ray Knight and all concerned. A Cabaret Ball has been a yearly feature in the Old Sappers Association calendar since that first happy function.

The Foundation President, Sapper Carlyle retired as President at the Twenty first Annual meeting on 10 November 1955 after 20 years in office. Sapper R. "Bob" Hutchinson was elected as President. At the well-attended Christmas meeting on 9 December, the President, Spr R. Hutchinson presented Life membership badge number 9 to Sapper M. Beck a recognition well earned by our former secretary and the first badge awarded to a member with active service in World War 2. Spr R. Knight made a presentation to Spr "Tiny" Carlyle, now immediate past President, in recognition of his service to the OSA.

This busy month included the Annual Christmas Party for 190 children accompanied by adults on 11 December. A welcome was made to 65 National Service Trainees on 13 December and there was a ladies' night on 17 December.

Finally, in 2014 the Old Sappers Association of Victoria was wound up and merged into the new Royal Australian Engineers Association of Victoria (Incorporated). The OSA membership was dwindling, and many younger sappers were not attracted by the prefix "Old".

Despite strong historical bonds and outstanding camaraderie provided by the OSA, the merger was viewed as the best pathway forward. The well-established tradition of calling all members Sappers in the new association was adopted along with displaying the Old Sappers distinctive badge on publications etc.

The "Old Sappers History Room" included in the construction of Oakleigh Barracks, and funded by the OSA ($40,000), along with substantial memorabilia were handed over to the new Association. Being a long-time member of the OSA, and being on the committee of the new Association, Don Hughes assisted in the merger along with Alan "Blue" Rantall (a Vietnam Tunnel Rat) and Jim Crosling. Jim Muir had the honour of being the final President of the OSA.

1977 – 2007 Royal Australian Engineers Association

In 1977 a group of ex-sappers in the other ranks (OR's) canteen at Ringwood Engineer Depot met and decided that they should have a reunion of any old sappers who had left the Ringwood depot.

The biggest problem was to find all these ex-members without the aid of computers, internet, mobile phones, Facebook, Google, etc. This meant that they needed to get hold of the old nominal Roll books from the Orderly Room and hand write these names onto filing cards together with the members contact details then make numerous phone calls and write many letters. It took many hours with a core group of four members Kevin Coleman, Mike Potts, Lindsay George and the OR's PMC at the time Mel Constable, aided by many willing volunteers.

Later that year with the help of Ron McMillan, who at that time was WO2 of 8 Field Squadron, a committee was formed with Ron as the President and the Royal Australian Engineers Association was born.

In 1978 the constitution was established, bank accounts started and the name Royal Australian Engineers Association was registered. Major General Ken Green was asked to be our patron, which he accepted.

The first function was to be a reunion to be held at the Ringwood depot on Remembrance Day, 11 November 1978. Invitations were then sent out and advertising placed in the local papers and on radio. The response was fantastic and it was a great day. It was then decided to have an annual reunion as close as practicable to Remembrance Day.

There were other functions held throughout the year, for example, dances, country and western nights, car rallies and picnics but it was the reunions that attracted a lot of patronage.

Ron McMillan passed away in 1987 and the Association, after 10 years slowly disbanded.

An attempt to restart the Association was in February 1993 when Bill Atkins, who had been a Captain in 10 Field Squadron, took over as President. On 16 April 1994 the committee with the help of Colonel Bruce Wadeson and WO2 Bill King held an Extraordinary General Meeting followed by a BBQ and once again the Association was operational. In 1995 Eddie Vial was elected President and the committee decided that the cost of posting the Sapper Summit for the members was to be borne by the Association.

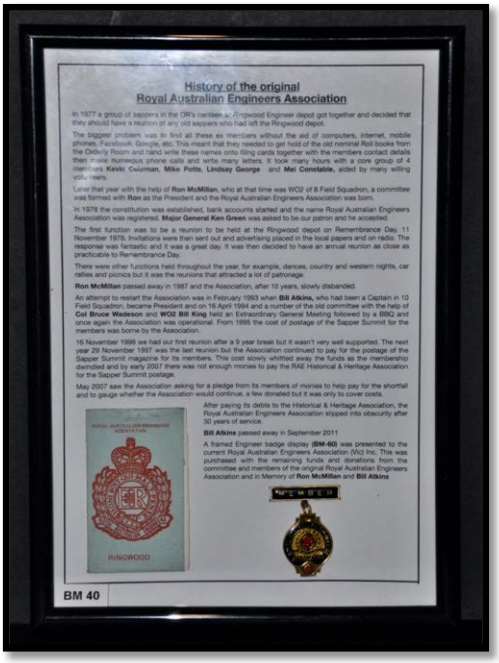
16 November 1996 we had our first reunion after a 9-year break and they continued until our final one in November 1999. Eddie Vial passed away in November 2001 and in 2004 Russell Frost took over as President.
The Association continued to pay for the postage of the Sapper Summit magazine for its members, but this cost unfortunately slowly whittled away the funds as the membership dwindled and by early 2007 there was not enough monies to pay the RAE Historical & Heritage Association for the Sapper Summit postage.

May 2007 saw the Association asking for a pledge from its remaining members of monies to help pay for the shortfall and to gauge whether the Association would continue, a few donated but it barely covered costs.

After paying its debts to the Historical & Heritage Association, the Royal Australian Engineers Association slipped into obscurity after 30 years of service.

Bill Atkins passed away in September 2011

A framed Engineer badge display (BM-60) was presented to the current Royal Australian Engineers Association (Vic) Inc. in memory of Ron McMillan, Bill Atkins & Eddie Vial and in recognition of the original Royal Australian Engineers Association.



The Original Royal Australian Engineers Association membership 1985-1986



Framed Collection of Engineer badges from Federation to 2014

91 Forestry Association – "The Woodpeckers"

In the post-WW2 era, from 1947 to the mid-1980s, the Forests Commission Victoria (FCV) sponsored Australia's only military sawmilling unit, the 91 Forestry Squadron, which was a supplementary reserve unit of the Royal Australian Engineers (RAE).

Established and commanded by FCV forester and WW2 veteran, **Major Ben Benallack**, the **"Woodpeckers"** as they were known, comprised a small pool of specialised soldiers capable of rapid mobilisation in the event of a need.

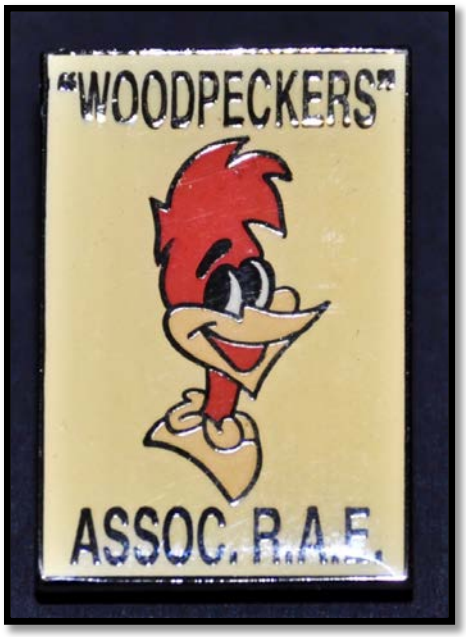
Several other Victorian departments such as the State Electricity Commission (SEC) did the same thing by supporting a construction squadron based at Newborough in the Latrobe Valley. It created a very active and capable part-time military group that completed many worthy projects across the State.

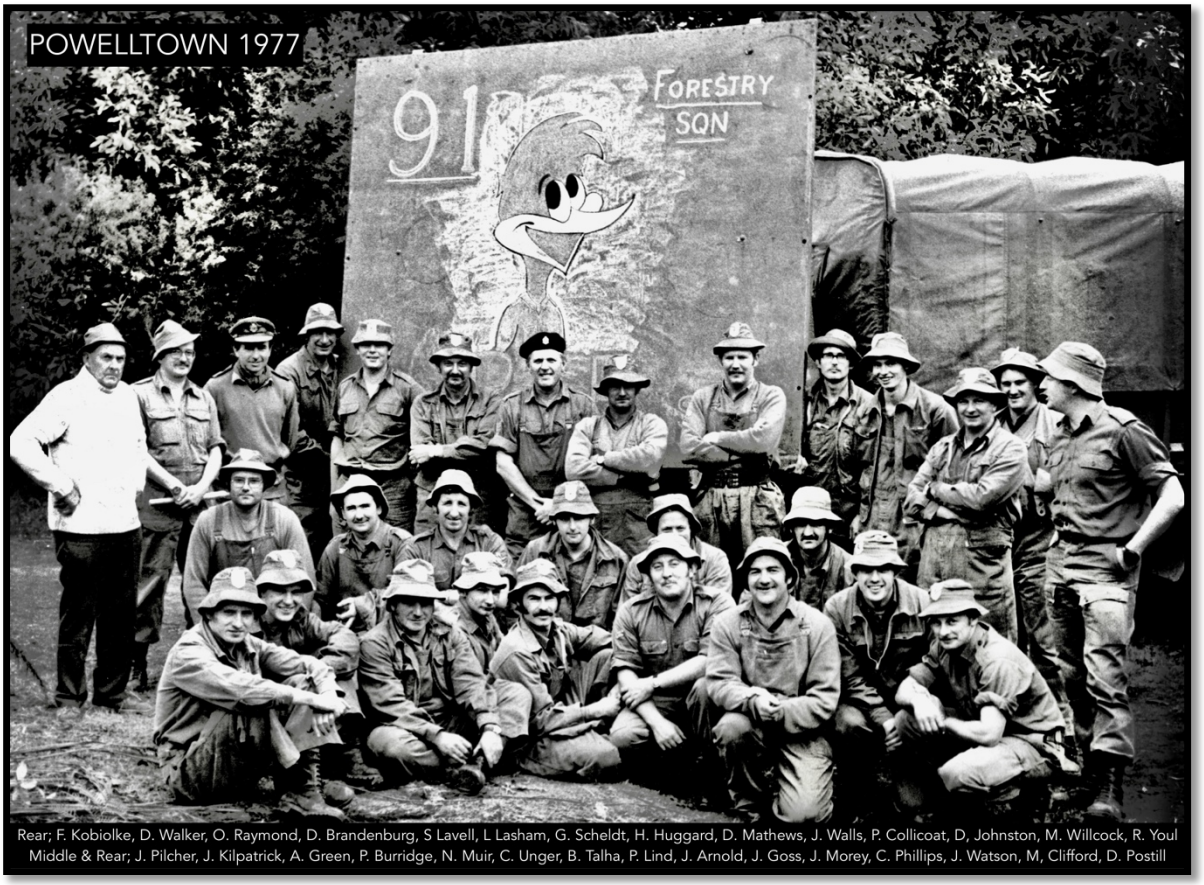
The 91 Forestry Squadron operated bush sawmills, built timber bridges along the Murray River, the suspension bridge at Tarra Bulga National Park, the Snake Island jetty, logging roads and various demolition tasks. Numerous Commission employees and others from the forestry sector served long periods in the unit.

Major Benallack (1963–1966), or Ben, as he was affectionately known to many, entered the Creswick School of Forestry in 1920. He held diplomas of Creswick and Canberra and was a member of the Institute of Foresters of Australia. Overall he served until 1953, as Chairman of the Victorian Division of the Institute.

During his early years in the profession, he served as assistant forester and later officer-in-charge of a forest district. He worked in the Powelltown, Millgrove and Neerim areas, the centre of the Victorian sawmilling industry at that time. Ben served overseas for 5½ years in World War II and was OC 2/2 Forestry Company R.A.E., A.I.F., with the rank of Major. During the post-war years he founded and commanded 91 Forestry Squadron; he retired from active service in December 1963.

Ex World War 2 Forestry Company, 91 Forestry Sqn, 55 Resources Sqn, and 105 Construction Sqn formed The Woodpeckers Association in about 1984.Les Malseed was the OC with the 1st President John Morey and 1st Secretary Michael Murray. Main meeting venues were at the Puckapunyal -"Mill Site". Each year a reunion/get together at a country location because of the state spread of members. Each year a local organiser is appointed to develop and manage the following years activities





Rear; F. Kobiolke, D. Walker, O. Raymond, D. Brandenburg, S Lavell, L Lasham, G. Scheldt, H. Huggard, D. Mathews, J. Walls, P. Collicoat, D, Johnston, M. Willcock, R. Youl
Middle & Rear; J. Pilcher, J. Kilpatrick, A. Green, P. Burridge, N. Muir, C. Unger, B. Talha, P. Lind, J. Arnold, J. Goss, J. Morey, C. Phillips, J. Watson, M, Clifford, D. Postill

The Blue Tongues

The "22 Construction Regiment Ex-Member Association" (The Blue Tongues) formed in the mid 1990's and conducts a full weekend reunion in October each year mostly in country locations. Peter Bloor was the inaugural Secretary and continued until his death in 2003. He started it as a 105 Sqn reunion, but it immediately expanded.

The infamous "Blue Tongues" are the informal association of veteran members of the Victorian Construction Engineers, based on 22nd Construction Regiment, but in particular, the 105th Construction Squadron, Royal Australian Engineers. They are essentially a retired group of Sappers who served together in the 1970s, 80s and 90s. They gather for annual get-togethers at Majors Creek, near Nagambie, in central Victoria each year.

Bill Mitchell, a long-serving member of the Squadron explains, *"The Blue Tongues were initially formed from an idea that Les (Foxy) Francis and George Weekes had about 30 years ago: an annual camping trip to catch up with old mates from the Army each year. Both "Foxy" and George were members of 105 CS".* Bill goes on to state:

"We had joined 105 Squadron years before as we all worked in the State Rivers and Water Supply Commission [SR&WSC]. One of the best parts of being an Army Reservist, was the camaraderie, we just loved catching up with old mates. We all looked forward to the camp each year to do something different from our "day to day jobs" and catching up around a campfire with a few beers.

Once we left the unit, all for different reasons, we thought a weekend camping trip would be a great way to catch up with old friends. Majors' Creek campground at Mitchelstown, near Nagambie, was selected as it was deemed to be in a central position in Victoria. Everybody we could think of was sent an invite: it did not matter what unit (105,106,107 or 91 Forestry). It was called the "105" camp, but only because we had thought of it!



Many came and they would bring their friends, no matter if they had served in the Squadron or not. Many families and friends of the Squadron would meet annually in a friendly and relaxing environment. We then changed the name of the camp to reflect the variety of attendees – to the Blue Tongues! Every year a strong group attends the camp and it has grown to a 4-day event!

Not all attend for the whole 4 days; some just drop in for a day, or night or two. The main attraction however is reminiscing about the old stories of the fine achievements of the Squadron and broader reserve in Victoria (often repeated year after year), BIG fires and a camp oven and spit roast being kept really busy – especially on the Saturday night!"

The Blue Tongues annual camping trip to Majors Creek is an institution and a fine tribute to the dedication and tenacity of the members of 105 Construction Squadron RAE. George Weekes, Les Francis and Bill Mitchell, all from northern Victoria. They meet each May on the banks of Majors Creek at Nagambie foe a weekend at a reserve campsite, with campfires from the Friday to Sunday.

RAE Historical and Heritage Committee 1992 - 2014

Colonel Bob Slater AM, RFD was the Commander of 6th Engineer Group from 1988 to 1992. He wanted to ensure that Victorian Sappers did not lose any historical or heritage memorabilia in the transfer to the new Oakleigh Depot after the final parade at the Swan Street Depot on 3 November 1991.

His aim was to ensure that no records or memorabilia were lost. He wanted unit and mess memorabilia to be accounted for, and where appropriate, to be displayed and properly recorded.

By 1992 most historical material had been relocated to Oakleigh and placed in a filing cabinet and a 2-door cabinet in a "garage" type building at Oakleigh.

The Corps Committee decided that a new RAE Historical and Heritage (H&H) Committee should be established under the leadership of Lieutenant Colonel R.F. (Bob) Eastick MBE, past commanding officer of 22nd Construction Regiment (1956-60), with the task of ensuring the safety of existing memorabilia and records and maintaining future historical records and matters.

The new "H & H" Committee should also cover several activities of interest to serving and retired Sappers but should be careful not to interfere with the affairs of the existing Old Sappers Association (OSA). The OSA had been established about 70 years previously, and at all that time had been almost the only representative body, other than the Officers and Sergeants Messes, for serving and retired Sappers. By 1992 the OSA was becoming much less active, but it was considered important that the new H&H organisation should not intrude on their affairs.

The H&H Committee held its first meeting at the Oakleigh Depot on the afternoon of the last Friday in March 1992. The members were all retired Sappers, who had been approached individually by Bob Eastick. They included Bill Atkins, Bruce Campbell (ex 105), Norm Dodgson (ex SSM 105 and RSM 22), Bill Goodall (WW2 veteran) and Les Malseed (ex 22 Const Regt and OC 91 Forestry Sqn). Of these, Campbell, Dodgson, and Malseed continued to serve as members of the Committee until its final meeting on 8 April 2014, after which it merged with the RAE Association of Victoria (Incorporated). Present at that meeting were Brigadier "Hutch" Hutchinson DSC (Colonel Commandant RAE Southern Region), Lieutenant Colonels Rob Youl OAM, RFD and Don Hughes, Majors Bruce Campbell RFD, ED, Les Malseed ED, Cliff Parfitt, and Graeme Lambert RFD along with Jim Davis, Maureen Rundell, Eric Howatt, Austin Byrne and Norm Dodgson. Jim Crosling, Jim Muir (Old Sappers Association) and Elaine Malseed were guests.

The H&H Committee had become an Incorporated Association for legal reasons in 2004. Bill Atkins and Bill Goodall were both forced to retire for health reasons in 2008.

Bob Eastick opened the first meeting by welcoming the members and giving an outline of the matters the committee would be responsible for. Firstly, office bearers were appointed (with no nominations or elections). Bruce Campbell became Secretary as he had just retired from full time employment two days previously, and Les Malseed became Vice President with Norm Dodgson as Treasurer.

After their establishment in 1992 the H&H Committee soon became involved in many activities other than just historical records. They increased the frequency of meetings from 4 to 6 per year at regular 2 monthly intervals. They were seen as the only organised RAE group available in Victoria, and hence became the "go to" organisation, generally expected to take on any tasks for RAE.

The first, and largest task allocated by the Corps Committee was the preparation of the bibliography for the fourth volume of the history of the Royal Australian Engineers, 1945 – 1972, *Paving the Way,* by Brigadier P.J. (Phil) Greville CBE. This task was accepted in about 1999/2000 and involved the reading of the draft of the publication, listing the names of approximately 900 Sappers mentioned in it, in alphabetical order, consulting their military records, and then compiling their individual details, including all page references in the book.

This task required a 4-person team working 1 full day per week at Victoria Barracks in Melbourne consisting of Bruce Campbell, as leader, with the Secretary Eddie Vial typing, plus 2 other members working on a rostered basis. Eddie Vial's contribution to this task was of tremendous importance. Eddie had been a Warrant Officer who had served at the Ringwood Depot. He joined the Committee in the late 1990s, and became Secretary when Bruce Campbell was elected President in 1999.

Sadly, Eddie suddenly died of a heart attack in November 2001. He had made a tremendous contribution to the Association in his short time as Secretary. Austin Byrne, who had joined the Association in 2000, then became Secretary.

"Sapper Summit" - Newsletter to a Historical Document

The Committee initially met 4 times per year, and the Secretary, after each meeting typed a copy of the minutes plus relevant information which he entitled "*Sapper Summit*". The first of these, produced as a 2-page document, in about April 1992 it was probably sent just to committee members. It quickly however, developed into a multi-page newsletter, with details of future activities planned by the committee, and other news items.

The publications were initially produced four times per year to correspond with committee meetings. It was not long before the task of typing the newsletter became too much for the Secretary, especially as the activities of the Committee expanded, and other people (at one stage the typist at John Wertheimer's office) took over typing and various printing services became involved.

Austin Byrne had become Secretary in 2001. He took over the typing of the newsletter and commercial printers took over the task of printing. The posting out also became a major task, when 4 times per year, a working group organised by Bill Atkin and his wife, with 2 or 3 other helpers would meet at the Oakleigh Depot and arrange the postage of some hundreds of multi-page printed copies of *Sapper Summit.*

There were 11 Corps Newsletters produced up to December 1994. In April 1995, the newsletter had the heading: **"SAPPER SUMMIT" – RAE Corps Newsletter – Victorian Engineers – Number 12.** (The earlier Corps Newsletters had retrospectively been allocated an "Issue Number"). From this point on, one of the primary objectives of the H & H Committee was the production of *Sapper Summit*. The last issue edited by Austin Byrne, was No 86 in June 2014.

Major Graeme Lambert RFD [former OC 10 Field Squadron (Independent) and Teacher] then assumed the role of Editor – *Sapper Summit* and established the magazine as the preeminent Sapper magazine throughout the country. Graeme retired in 2021 for health reasons and was later awarded a Head of Corps Royal Australian Engineers Commendation for his outstanding contribution to *Sapper Summit.*

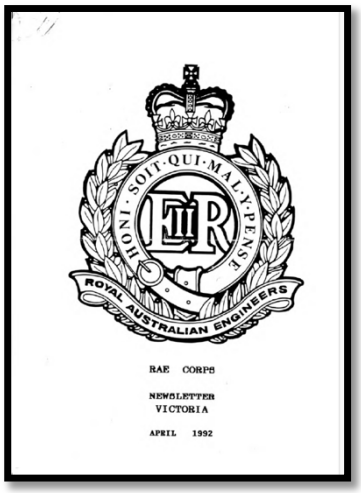
Michael Potts (ex 10 Field Squadron and also Teacher) became Editor of Sapper Summit. In December 2021, issue number 105 was widely distributed around Australia announcing the final withdrawal of Australian troops from Afghanistan, the ongoing sapper support to COVID and other Domestic Operations, along with the anticipated celebrations of 120 years of Australian Sappers in 2022.

Sapper Summit is currently a professionally produced, biannual, sixty (+) page magazine that is highly regarded and recognised Australia wide. The magazine has continued to not only provide up to date news on Sapper functions, activities and developments, but also provides a wonderful medium to record Sapper history in Victoria.

In 2025 Michael Potts was awarded an RAE Commendation for his fine work as Editor.

Corps Commendation is presented to Michael Potts (Editor) by RAE Corps RSM WO1 Peel (representing the HOC – BRIG Michael Say)





First Sapper Summit



First Sapper Summit on the Heading



Latest Edition

Sir Clive Steele Lectures - Learning from the past

Other tasks undertaken by the Committee included the arrangement of excursions and a series of lectures on RAE and other military and engineering matters by serving and retired RAE Sappers. One excursion was to HMAS Cerberus to witness live shooting by the coastal battery. The lectures on a wide range of military and engineering topics were extremely popular.

One of the lectures organised in 1995 became the precursor to the series of ***Sir Clive Steele Lectures*** which have now become an annual event.

In 1995, just after his return from the United Nation's Peacekeeping and Demining operation in Mozambique (ONUMOZ), Major Don Hughes gave a presentation on humanitarian demining. At the time, the international campaign to ban landmines was being championed by Dianna, Princess of Wales (1 July 1961 – 31 August 1997), and was reaching a crescendo of international support.

The Australian government still officially supported the use of landmines. As a serving officer, Don was only able to describe the physical effects that landmines had on people and animals long after their military use had passed. He could not make any political statement. The audience was left in no doubt however, about which side of the argument should be pursued by Australia.

Ultimately, the Ottawa Treaty, on the convention on the prohibition of the use, stockpiling, production, and transfer of anti-personnel mines and their destruction was signed on 3 December 1997 by 133 signatories. Of note, non-signatories included United States, Russia, and China.

Other Sir Clive Steele Lectures have often included both historical sapper examples, along with current operations, by sapper commanders at the time. Lieutenant Colonel Stephen Day DSC gave an enlightening presentation on the deployment of the 3rd Combat Engineer Regiment (3 CER) into Timor-Leste in 1999. As the Commanding Officer of 3 CER, Stephen was also the engineer commander for all sappers in support of the international emergency force in East Timor (INTERFET). This 2000 Sir Clive Steel Lecture was riveting, relevant and timely. It left no doubt of the critical need for sappers at both the *"teeth and tail"* of conflicts in the twenty first century. Other lecture topics have included; Military Surveying, Special Engineer Operations, Overseas Humanitarian Projects and Sapper support to operations

In 2019, Brigadier John Shanahan DSC, AM, OBE gave a superb *Sir Clive Steele Lecture* on his critical involvement as commander of all forces in the Middle East. He had assumed this role after the Commander, an American General, had been killed whilst in command. Brigadier Shanahan was also the guest at 22nd Engineer Regiment's family day and end of year parade that year. An ex-Royal Engineer, Brigadier Shanahan had seen much operational service worldwide.

Incorporation – RAE(Victoria) Historical and Heritage Association

Captain Bill Atkins had a large hand in the organisation of excursions. Les Malseed and his wife Elaine provided afternoon tea or supper for the lectures. Committee members increased over the years as the duties increased, and by 2000, there were about 15 members. By 2002, they included Lieutenant Colonels Rob Youl OAM, RFD (former OC 91 Forestry Squadron and CO of 7 Engineer Support Regiment), Colin Bowater RFD (former CO 7th Field Engineer Regiment) and Bill Van Ree (former ARA officer and CO 22 Construction Regiment).

In 2003 the original H&H committee became incorporated mainly to protect individuals in the upgraded Association **[RAE (Victoria) Historical and Heritage Association (Incorporated)]** from the danger of legal action in the event of members being injured on excursions or similar activities.

Also, for legal reasons, the financial affairs were checked annually by Captain Morrie Squirrel (ex SSM 105 Construction Squadron and RSM 22 Construction Regiment) who was appointed auditor. Norm Dodgson (also an ex SSM of 105 Construction Squadron and RSM 22 Construction Regiment) remained Treasurer for the whole 22 years and did a fine job. Bill Atkins and Bill Goodall suffered from ill health and after many years of good service, retired.

Austin Byrne had done a tremendous job as Secretary until 2013, when he handed over the task to Jim Davis, who took on the job, under Austin's tutelage for the last year before the H&H Committee was wound up, and the new RAE Association of Victoria introduced.

The RAE (Victoria) Historical and Heritage Association (Incorporated) held its last Annual General Meeting on 8 April 2014 and converted to the new Royal Australian Engineer Association of Victoria (Incorporated), with Lieutenant Colonel Colin Bowater RFD as its inaugural President, Jim Davis its inaugural Honorary Secretary and Maureen Rundell as Treasurer.

At the ceremony held to commemorate the event they presented certificates of Honorary Life Membership of the new Association to several exemplary sappers: Major Bruce Campbell RFD, ED, Major Austin Byrne RFD, Major Les Malseed ED, Norm Dodgson and Lieutenant Colonel Rob Youl OAM, RFD. In the case of Rob Youl, the recognition was for the tremendous work he applied in producing the book "Swan Street Sappers".



Norm Dodgson being presented his life Membership by Brigadier "Hutch" Hutchinson DSC and Colin Bowater with Bruce Campbell looking on

2014 Royal Australian Engineers Association of Victoria (Incorporated)

The current Sapper organization in Victoria, The Royal Australian Engineers Association of Victoria (Incorporated), was established in July 2014 with the first office bearers; President Lt Col Colin Bowater RFD, Secretary Jim Davis and Treasurer Maureen Rundell. Other inaugural committee members were: Don Hughes, Cliff Parfitt, Jock Howatt, Graeme Lambert, Margaret Handte and Tony Jackson.

The current Association was an amalgamation of the Old Sappers Association, the RAE Association and the History and Heritage committee.

The new Association closely aligned itself to the 22nd Engineer Regiment which had been raised on 1 January 2014 by an amalgamation of the 4th Combat Engineer Regiment based at

Ringwood East, and 22nd Construction Regiment based at Oakleigh. The sub-units were 10th and 8th Combat Engineer Squadrons, 105th Construction Squadron and 203rd Works Section.

The Vision Statement of the Royal Australian Engineers Association of Victoria (Incorporated) stated that it will be the most relevant and recognized Sapper Association in Victoria with substantial membership and an enhanced profile and standing within the serving and retired sapper community.

The Mission Statement was to promote the wellbeing and betterment of our members along with serving and retired sappers by the provision of a collegiate sapper association that values and promotes comradeship, spirit de corps, service identity and traditions.

The RAE History Room at Oakleigh Barracks

The Royal Australian Engineers Association (Vic) has use of a room that was built specifically for the Old Sappers Association to use during the construction of the new Oakleigh Depot.

The Old Sappers Association was formed in 1934 with the constitution being drawn up in 1935. They had use of the combined Sergeants mess at the Swan Street depot, Melbourne. Swan Street in that area was later renamed Olympic Boulevard.

The Association's first President was Albert E. Carlyle from 1935-1955.

In January 1955 the Old Sappers Association was allocated one of the wartime buildings in the depot area for their use. From then on, they never looked back and enjoyed 36 years of good times.

As a requirement to build the Southeastern Freeway road tunnels, the Swan Street depot was acquired. All units were relocated to Oakleigh on 3 Nov. 1991. Plaques now mark the old depot site on Olympic Blvd.

At Oakleigh a room was built off the North end of the drill hall at the same time as the new depot was being built, this room was totally paid for by the Old Sappers Association, for their exclusive use.

The room at Oakleigh had a bar at one end, with a sink, hot and cold water, fridges etc. and opened directly onto the drill hall.

Having that area off the drill hall allowed the Old Sappers Association to have functions there like meetings, parties and dinners with plenty of room for tables and chairs, all just outside their room.

In 2014 the Old Sappers Association amalgamated with the Royal Australian Engineers Association (Vic) Inc. the room was then renovated and converted into the RAE History Room.

The RAE History Room now has a number of display cases that have been donated and a large collection of memorabilia which includes a full collection of Army Sappers' knives from the Boer War to present day, Waterloo and Boer War medals, a great collection of badges, books

and PAM's, trench art from WW1 & 2, swords (one that belonged to Sir Peter Scratchley) and numerous uniforms and headwear.

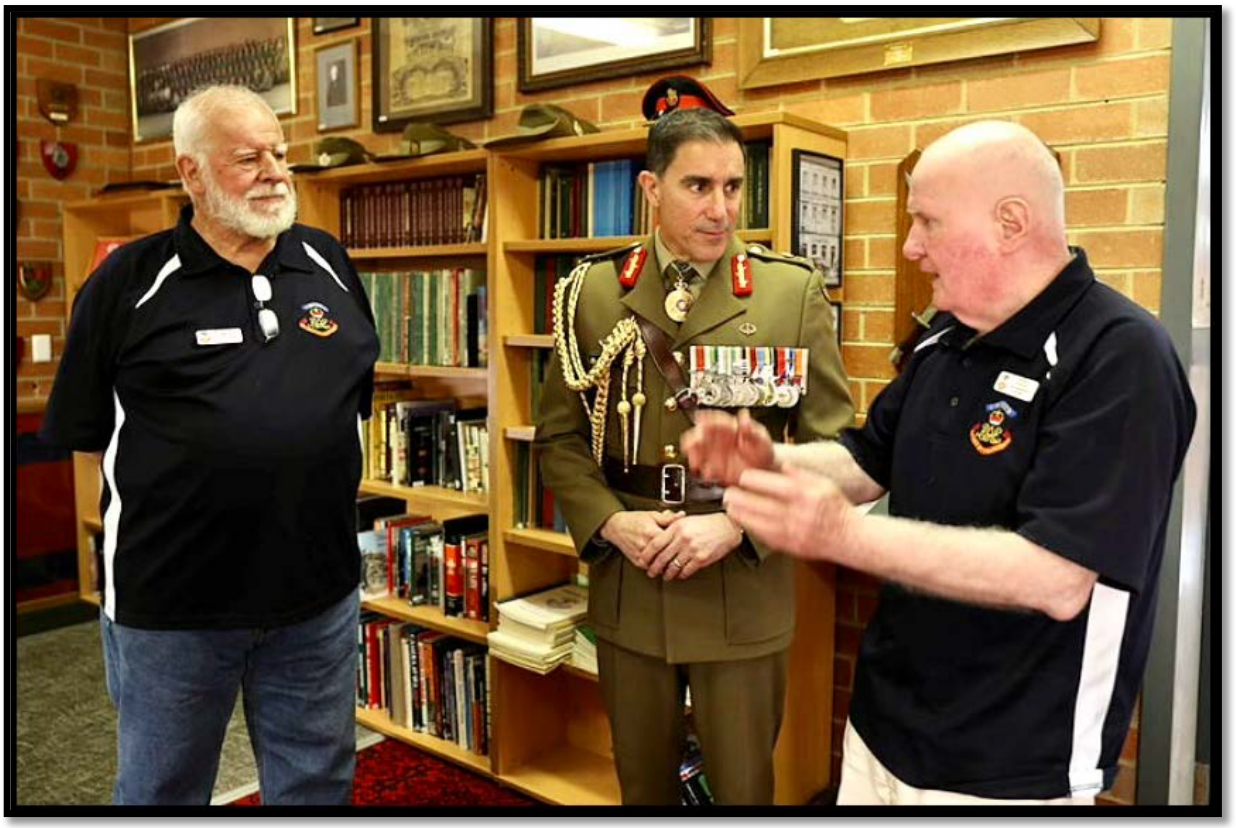
There are three more areas within the depot at Oakleigh that are used for surplus memorabilia. We work closely with the Ringwood and Newborough depots with their collections as well.

All items of memorabilia, photos, etc have been catalogued and are available for viewing at the Association's web site; raevictoria.com



The photos show part of the RAE History Room.





The Chief of Army, Lieutenant General Simon Stuart, AO, DSC is shown through the RAE History Room at Oakleigh by Jim Davis, RAE Association Secretary (right) and Mel Constable, Curator of the History Room. 13 October 2023.



ROYAL AUSTRALIAN ENGINEERS

Corps Commendation

Awarded to

Mr Mel Constable

This commendation is awarded in recognition and acknowledgement of your exemplary contribution to the preservation and promotion of Royal Australian Engineer heritage and history in the state of Victoria.

You are commended for your initiative, leadership and drive in the initiation of projects to rescue and restore irreplaceable Royal Australian Engineer artefacts. Your substantial contribution of time and personal resources invested into the development of knowledge and skills to deliver these projects providing exceptional outcomes.

Your tireless efforts and technical skill have been instrumental in the preservation and public display of articles of the history and contributions of the Corps. Your leadership and commitment has ensured that current and future Sappers, their families and all Australians can access formerly unavailable information and articles that highlight the important and often untold story of the Corps in Victoria.

Your dedication, professionalism, knowledge, and infectious enthusiasm in the identification and implementation of heritage and history projects in Victoria has been of great value to 22 Engineer Regiment and the Corps of Royal Australian Engineers. Your efforts have brought great credit to you and the Royal Australian Engineers Association of Victoria.

01 November 2020

J. Carey, CSC
Brigadier
RAE Head of Corps

The RAE Corps recognised the work involved in creating this History room by presenting Mel Constable with a Corps Commendation and a Head of Corps Challenge Coin.

Emblems, Badges and Mascots

Mascots for military units and organisations add greatly to morale and esprit de corps. Often, they take the form of animals that embody the characteristics that the unit or organisation aspires to. Plaques, coins and badges contribute greatly to both recognition and highlighting particular characteristics.

22nd Engineer Regiment – 2014 -

The Platypus

The emblem of the 22nd Engineer Regiment features the Platypus (Ornithorhynchus anatinus), a uniquely Australian creature whose characteristics closely mirror the diverse capabilities and resilient spirit of Combat and Construction Engineers.

The Platypus is a highly adaptable monotreme, capable of operating effectively both on land and in aquatic environments — a direct reflection of the Regiment's proficiency in amphibious, close-country, and riverine operations. Like the Sappers of 22 ER, the Platypus is a skilled digger, tunneller, and builder, able to construct secure and habitable shelters even in the most challenging terrain.

Its natural camouflage and elusive behaviour symbolize the Regiment's expertise in concealment and stealth, essential for tactical engineering operations. The Platypus also possesses sharp venomous spurs, serving as a reminder that while the Regiment is focused on construction and support, it is equally capable of delivering decisive force when provoked — with precision, ferocity, and explosive effect.

The Platypus's tail, used for carrying loads and storing energy reserves, represents the endurance, logistical strength, and resourcefulness of the unit. Its evolutionary lineage, dating

back millions of years, speaks to the timeless resilience and innovation inherent in military engineering.

Remarkably, the Platypus is biofluorescent and equipped with electroreception — a natural radar system used to detect prey in murky waters. These traits metaphorically align with the Regiment's advanced detection, navigation, and problem-solving capabilities in complex operational environments.

Culturally, the Platypus holds deep significance. In the language of the Wurundjeri people — the Traditional Custodians of the land surrounding the Yarra Valley in Victoria — the Platypus is known as "Wad-dirrang." This connection honours the enduring relationship between the Regiment and the land it serves.

In every respect, the Platypus is a symbol of versatility, strength, and ingenuity — qualities that define the Sappers of the 22nd Engineer Regiment.









22 Construction Regiment – 1950 - 2014

The Castle

A castle is a type of fortified structure built during the Middle Ages predominantly by nobility or royalty and by military orders. They were designed to be both defensive structures and residences. They are often a symbol of power and prestige.

Military engineers have always been associated these types of fortifications, with both their construction, and the breaching of them during conflict.

It is unclear exactly when the “castle” was adopted by 22 Construction Regiment (Supplementary Reserve) as its preferred emblem. The name of the unit’s newsletter was also named “The Castle”.

Of interest, the emblem of the Logistic Support Force Engineers was also a castle.

Colour Patches

The Australian Army wore colour patches from 1915 to 1950, as a means of distinguishing units. In July 1987 it was decided to permit the wearing of colour patches again, on the puggaree of the hat khaki fur felt (the slouch hat)



105th Construction Squadron

The Tuan

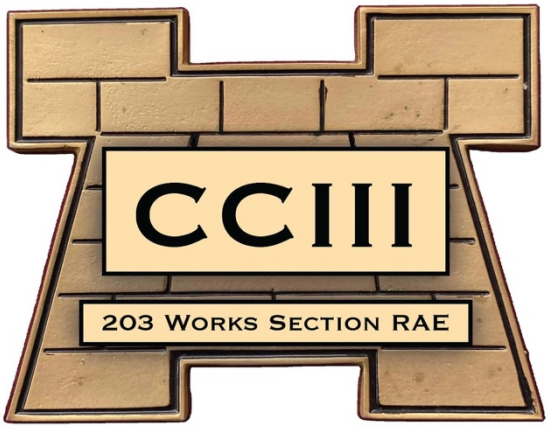
The mascot of 105th Construction Squadron since the 1990's, is the Tuan! Captain Noel Tipton gives an insight:

"The mascot for the Squadron is the ***Brush-tailed Phascogale, also known as the Tuan****. It is a small nocturnal, arboreal (tree dwelling), carnivorous marsupial that resides predominately in Victoria. The Tuan is a most appropriate mascot for Sappers involved on numerous operations and detachments around the globe, and at home, particularly construction tasks and relief operations.* ***The tree dwelling marsupial, always comes home to protect its territory!"***

105 CS has consistently protected and enhanced its home territory. Fearlessly, it fights bushfires, protects our people and forests, and constructs field and permanent fortifications, along with numerous construction projects to assist the Victorian and Australian communities. The claws and influence of the Tuan - also reach globally.



203rd WORKS SECTION



Modified LSF and 22CR emblem

The emblem for 203 Works Section was adapted from the plaques of Headquarters Logistic Support Force Engineers and 22 Construction Regiment (SR). The Roman numerals pay homage to the antiquity of a military engineering heritage.

The emblem was designed by Mel Constable and Don Hughes, with input from Noel Tipton, CPL Peter Borzdybski and WO2 Scott White.

Various plaques sponsored by the RAE Association of Victoria







The Clock Tower in Ringwood





ANNEXES

A. Honours and Awards for Victorian Sappers

B. Colonels Commandant – Victoria

C. RAE Association of Victoria (Incorporated)

D. OC's, SSM's, CO's and RSM's

E. Abbreviations

F. Bibliography

ANNEX A - HONOURS & AWARDS SYSTEM FOR VICTORIAN SAPPERS

From an Imperial British Honours and Awards system, established at the peak of the British Empire in the mid 1800's, the method of honouring Victorian Army Engineers has transformed dramatically over the last 75 years. Australia adopted its own Honours and Awards system in 1975. There was a great period of transition moving between these two distinct and different systems.

Recognition of *"duration of length of service"* in both systems, seemed to change regularly to suit community thinking at the time. For example, the Volunteer Officers Decoration was introduced in 1892, carrying the unfortunate postnominal "VD". Indeed, Sir Clive Steele, our Engineer in Chief during WW2, included the post nominal "VD" amongst his many other honours and awards.

In both systems, awards were differentiated between commissioned officers and other ranks with both separate medals and the use of post-nominals. In the new Australian honours (1975) and awards system, a reserve officer could be awarded the Reserve Force Decoration with the post nominal of "RFD". To avoid this discrepancy between other ranks and permanent officers, later it was discontinued with the introduction of a common Defence Long Service Medal in 1999. Various transitional arrangements occurred between the numerous awards recognising service.

For example, on 26 January 1881 the Colony of Victorian in Australia produced its own medal for the first time. This was the silver Victoria Volunteer Long and Efficient Service Medal (1881-1901) for completion of a period or periods of effective service, not necessarily continuous, amounting to not less than 15 years. With Federation and the demise of the colonies this saw the end of colonial medals.

With a diverse range of military and civilian backgrounds undertaken by Victorian Sappers, a wide array of awards can be found. Often awards from other services (Police, Fire, Ambulance, SES, Corrections etc) along with other nations (UK, PNG, Canada, etc) can be observed.

Major General Gordon Maitland's well illustrated book, *Honours and Awards of the Army*, records this medallic history well. He is a good example of this transformational era, having Joined at 17 years of age into the Second World War's Australian Imperial Force, Maitland was promoted through Corporal and Sergeant to ultimately command the Second Australian Division and a Branch of Army Headquarters. He was a member of the Chief of Army's Advisory Council. Appointed an Officer in the British Empire Order (OBE) and made an Officer in the Order of Australia



Local Forces Long and Efficient Service Medal

The medal awarded by the Colony of Victoria to its Volunteer Forces from 1881 to 1901 for 15 years of long and efficient service. The medal had two versions, with the first type (1881–1893) featuring a motto "AUT PACE AUT BELLO VICTORIA" ("Both in peace and in war Victoria") and the second type (1894–1901) using the motto "PRO DEO ET PATRIA" ("For God and Country").



Volunteer Officers' Decoration

The "VD" medal refers to the ***Volunteer Officers' Decoration*** *(or later, the* ***Colonial Auxiliary Forces Officers' Decoration****). Instituted by Queen Victoria in 1892, it was awarded to military officers in the British Empire for 20 years of long and meritorious service.*



The Efficiency Decoration

The Efficiency Decoration was a long service award for part-time officers of the Australian Citizen Military Force or equivalent. It superseded the Volunteer Officers' Decoration and the Colonial Auxiliary Forces Officers' Decoration. The decoration is an oval skeletal design and was struck in silver, with parts of the obverse in silver-gilt. The original badge is the same as that of the King George V version of the Territorial Decoration, 43 millimetres high and 35.5 millimetres wide, but with the decoration's subsidiary title inscribed on the bar-brooch. The subsequent King George V, King George VI and Queen Elizabeth II versions are of a new design, 54 millimetres high and 37 millimetres wide, with a 15 millimetres diameter ring suspender, formed of silver wire, which passes through a small ring affixed to the top back of the crown.



The obverse is an oval oak leaf wreath in silver, tied with gold, with the Royal Cypher of the reigning monarch in the centre below the Royal Crown, in gold. Four versions of the decoration have been awarded to Australians George V, George VI (King/Emperor and King) and Elizabeth II.

The clasps have either the Royal Cypher of King George VI (GVIR) or Queen Elizabeth II (EIIR) in the centre, surmounted by the Royal Crown, with the year of the award impressed on the reverse.



The Efficiency Medal Australia Elizabeth II

The Efficiency Medal Australia Elizabeth II is an Australian military service medal established in 1953 to recognize the service of non-commissioned officers (NCOs) and other ranks of the Australian Citizen Military Forces (CMF). The medal honours those who have displayed exceptional efficiency and dedication to the Australian Defence Force over an extended period and acknowledges their commitment to the defence of Australia and its interests.



The Defence Force Service Medal

The Defence Force Service Medal is a military service medal established to recognize the dedication and commitment of members of the Australian Defence Force (ADF) who have completed a specified period of service. The medal honours those who have served with distinction and acknowledge their loyalty and contribution to the defence of Australia and its interests.



The Reserve Forces Medal

The RFM is awarded to members of the Reserve Forces who have completed 15 years of accrued service. The medal was replaced in April 1999 with the Defence Long Service Medal, however clasps could still be issued for every additional 5 years of service. Regular service did not contribute to the addition of clasps.

The Reserve Force Decoration



The Reserve Force Decoration (RFD) is an Australian military award presented to officers of the Australian Defence Force Reserve for 15 years accrued service. This decoration honours the commitment and dedication of reserve officers, acknowledging their valuable contribution to Australia's defence capabilities. The RFD was replaced by the Defence Long Service Medal in April 1999, however clasps could still be awarded for additional service.

Gilted clasps are issued for every additional 5 years service in the Reserve Forces after the initial award of the medal. Regular service does not qualify. The clasp is attached to the ribbon above the medal with the full size and miniatures, and represented by a rosette on the ribbon bar.

The Defence Long Service Medal



The Defence Long Service Medal was established in 1998 on the recommendation of the 1994 Committee of Inquiry into Defence and Defence Related Awards.The medal replaced three awards: the DFSM, RFD and the RFM.Service that previously would have gone unrecognised when individuals moved between Regular and Reserve Forces is acknowledged by the Defence Long Service Medal. It does not discriminate between ranks or between Regular and Reserve service. The Defence Long Service Medal was formally established on 26 May 1998 by Letters Patent.



The Australian Defence Medal

The Australian Defence Medal was instituted in recognition of Australian Defence Force personnel who have either completed an initial enlistment period or served for a minimum of four years. Qualifying service must have been completed after 3 September 1945.

The National Medal



The Governor-General awards the National Medal. Nominations are made by the chief officer of the nominee's organisation. The chief officer of a recognised organisation also administers the medal for that organisation. Fifteen years' service is required to qualify for the National Medal. Clasps are available for each additional ten years' service.



The National Emergency Medal

The National Emergency Medal was approved in October 2011. Awarded to members of eligible organisations or individuals who rendered qualifying service

Typical awards include:

Victoria Volunteer Long and Efficient Service Medal
Volunteer Officer's Decoration
Volunteer Long Service and Good Conduct Medal
Colonial Auxiliary Forces Officer's Decoration
Colonial Auxiliary Forces Long Service Medal
Efficiency Medal
Efficiency Decoration
National Medal
Defence Force Service Medal
Reserve Force Medal
Reserve Force Decoration
Defence Long Service Medal
Australian Defence Medal
Champion Shots Medal
Anniversary of National Service 1951 – 1972 Medal
Australian Cadet Forces Service Medal
Humanitarian Overseas Service Medal
National Emergency Medal
Australian Operational Service Medal

United Nations Medal (Various)
Australian Active Service Medal 1975
Australian Service Medal 1975
Australian Active Service Medal 1945 – 75
Australian Service Medal 1945 – 75
Vietnam Medal
Vietnam Logistic and Support Medal
The Rhodesia Medal 1980
Australian Antarctic Medal
International Force East Timor Medal
Papua New Guinea Independence Medal
Papua New Guinea Tenth Anniversary of Independence Medal
Zimbabwe Independence Medal
East Timor Solidarity Medal
Elizabeth II Jubilee Medals (Various)
Centenary Medal
Australian Sports Medal
Soldiers Medallion
Commendations (Various)

ANNEX B – COLONELS COMMANDANT

ROYAL AUSTRALIAN ENGINEERS – VICTORIA

Over the years, Victoria has been referred to as Southern Command, Third Military District and Southern Region. The Colonel Commandant provides wise oversight to all activities of the Royal Australian Engineers in Victoria. The appointment is made by the Chief of Army and prior to February 1997, the Chief of the General Staff.

Southern Command

1955	Brigadier J. (Jack) Mann DSO, MID
1965	Major General Sir R.J.H. (Robert) Risson CB, CBE, DSO, ED, MID
1969	Major General R.R. (Ronald) McNicoll CBE, AM, MID

Third Military District

1972	Colonel, Sir O.G. (Oscar) Meyer KBE, ED, MID
1976	Major General K.D. (Ken) Green OBE, ED
1982	Colonel B. (Bruce) Addis RFD, ED
1986	Brigadier I.G.C. (Ian) Gilmore OBE, OAM, MID
1992	Colonel E.J. (John) Wertheimer AM, RFD

Southern Region

2001	Brigadier R.A. (Bob) Slater AM, RFD
2008	Brigadier P. (Hutch) Hutchinson DSC
2017	Colonel B.M. (Bruce) Murray AM
2026	Brigadier D. J. (David) Wainwright DSC, AM

ANNEX C – RAE ASSOCIATION of VICTORIA (INC)

ROYAL AUSTRALIAN ENGINEERS ASSOCIATION OF VICTORIA (INCORPORATED) for the year 2025

Monarch of the Royal Australian Engineers

His Majesty King Charles III

Honorary Colonel Commandant Royal Australian Engineers

Major General Steve Day DSC, AM

Head of Corps Royal Australian Engineers

Brigadier Mick Say DSC

Corps Regimental Sergeant Major Royal Australian Engineers

Warrant Officer Class One Russell Peel

Colonel Commandant Royal Australian Engineers Southern Region

Colonel Bruce Murray AM

Commanding Officer 22nd Engineer Regiment

Lieutenant Colonel Russell Collins

Patron RAE Association of Victoria

Colonel John Wertheimer AM, RFD

Madre RAE Association of Victoria

Chaplain Kirsten Linden

Canine Mascot RAE Association Victoria

Zeus

Committee

President	Don Hughes
Vice President	Todd MacDougall
Secretary	Jim Davis
Treasurer	Duncan Howarth
Curator	Mel Constable
Merchandise	Eric (Jock) Howatt JP
Member	Margaret Handte
Editor Sapper Summit	Michael Potts

Honorary Life Members RAE Association Victoria

Major Austin Byrne RFD (Retd)
Major Bruce Campbell RFD, ED (Retd)
Mr Norm Dodgson
Major Les Malseed ED (Retd)
Lieutenant Colonel Robin Youl OAM, RFD (Retd)
Lieutenant Colonel Colin Bowater RFD (Retd)
Colonel John Wertheimer AM, RFD, (Retd)

ANNEXE D - OC's, SSM's, CO's and RSM's

Officers Commanding 105th Construction Squadron

1950	Maj V.G. (Vic) Swanson MID*
1954	Maj J.H. (John) Standish*
1956	Capt/Maj J.R. (John) Tyson RE*
1959	Capt R.S. (Ron) Dickson*
1961	Maj J.R. (Jack) Dunne RE*
1965	Maj B.A. (Bruce) Campbell RFD, ED*
1977	Capt Maj B.J. (Brian) Chirgwin RFD, ED*
1982	Maj R.B. (Bob) Klos RFD
1985	Maj G.J. (Geoff) Spencer*
1989	Capt R.A. (Bob) Burnell
1991	Maj S.J. (Shane) O'Keefe RFD*
1993	Maj R.A. (Bob) Burnell
1995	Maj P. (Peter) Zambory*
1997	Maj D.C. (Don) Hughes JP*
1998	Maj P. (Peter) George
1999	Maj B. (Brent) Rodgers
2003	Maj M.K. (Mark) Roberts
2006	Maj M. (Mike) Longmire
2007	Capt N. (Noel) Tipton
2011	Maj A. (Allan) White
2013	Maj S. (Scott) D'Rozario*
2014 (Jun)	Maj A. (Tony) Johnston*
2016	Maj R. (Russell) Collins*
2018	Capt N. (Noel) Tipton*
2019 (Jun)	Maj S. (Jamie) Twidale CSM*
2022	Maj A. (Astrid) Hagqvist *
2024	Maj P.J. (Paul) Miller
2026	Maj J. (Jake) Kilsby

Notes*

*LtCol V.G. (Victor George) Swanson MID served in PNG as OC 20 Field Coy RAE in WW2 and later CO 22 CR (1954-56) as a reserve officer. After a career in the SR&WSC he chaired the Melbourne Harbour Trust (hence Swanson Dock). He was mentioned in dispatches (MID) for constructing the 1000-bed 2nd/7th Australian General Hospital (including its reticulated water supply) in Lae, PNG.

*Maj J.H. (John) Standish was an SR&WSC engineering officer who had served in the RAE in WW2. Later he became the Chief Construction Engineer for the SR&WSC

*LtCol J.R. (John) Tyson RE was formerly Royal Engineers in India in WW2, and worked for the SR&WSC. He was CO 22 Const Regt in 1961.

*Capt R.S. (Ron) Dickson, a SR&WSC engineer, conducted an impressive recruiting campaign for the squadron in 1957.

*Maj J.R. (Jack) Dunne RE was a WW2 veteran from the British Army. He served in India and worked for the SR&WSC.

*Maj B.A. (Bruce) Campbell RFD, ED (as a Capt) deployed with 4 Troop, 105 Const Sqn, to Wewak, PNG in 1963 to help relieve 21 Const Sqn constructing roads & bridges. Major Campbell also deployed as a Citizen Military Force (CMF) observer to South Vietnam in 1967, the first officer from 22 Const Regt (SR). With outstanding service as the OC of 105 Const Sqn, Bruce later became actively involved in the RAE History & Heritage Committee of Victoria for 22 years.

*Maj B.J. (Brian) Chirgwin RFD, ED originally Infantry, was a stalwart trainer, surveyor and great RAE character. His son Carl was a RAE Lt Col who was intimately involved in global landmine clearance and served in Mozambique.

*LtCol G.J. (Geoff) Spencer, a Scheyville graduate was CO 22 Const Regt in 1992. He worked originally with the SR&WSC then for the World Bank.

*Maj S.J. (Shane) O'Keefe RFD was originally recruited into 105 Const Sqn and served in numerous appointments. Later he was also OC 91 Forestry Sqn.

*Maj P. (Peter) Zambory was a civil engineer for the Port of Melbourne.

*LtCol D.C. (Don) Hughes JP, psc (r), Army Apprentice (29th C & J) and builder, served in Mozambique, PNG, UK, NZ and Banda Aceh (Indonesia). Later CO 4CER in 2000/1, instructing staff at ATSOC & ACSC, and President RAE Association Victoria. As the Commander of the Australian Service Contingent in Mozambique, Lt Col Hughes was awarded a Land Commander Australia Silver Commendation. For his work in PNG, he was awarded the 10th Anniversary of Independence Medal.

*Maj T. (Tony) Johnston served in the Regular Army as the OPSO of 22 CR, transferring to the active reserve after obtaining consulting engineer employment.

*LtCol R. (Russell) Collins psc (r), graduated from ADFA with a civil engineering degree (HONS) and served in Timor Leste and Afghanistan and Aboriginal Assistance projects. He was CO 22ER in 2024-5.

*LtCol S. (Scott) D'Rozario psc (r), was a Inspector in the Victorian Police and served in the UN Peacekeeping Operation in Southern Sudan and Timor-Leste. He was CO 22ER in 2021/23.

*Maj S. (Jamie) Twidale CSM, promoted from the ranks and served with the regular Army in Timor Leste, Solomon Islands and Afghanistan. He was the CEO of RSL Victoria.

*Capt Noel Tipton, ex-Army Apprentice (28th C&J) and WO1 Construction Supervisor, served in Rhodesia (Zimbabwe) and Timor-Leste.

*Maj A. (Astrid) Hagqvist psc (r), a Civil Engineer, served in Iraq, Timor-Leste and Aboriginal Assistance projects. Astrid was the first female Officer Commanding of the Squadron

Squadron Sergeant Majors 105th Construction Squadron

1950	Cpl/Sgt/WO2 C. (Claude) Grumley
1958	S/Sgt/WO2 R.S. (Ron) Carr EM
1962	WO2 N.J.F (Norm) Dodgson EM, RFM*
1969	WO2 J. (Jack) Muir OAM, EM
1972	WO2 N.J.F. (Norm) Dodgson EM, RFM*
1975	WO2 M. (Mike) Fleming EM*
1979	WO2 S.J. (Stewart) Olney RFM
1983	WO1 M. (Maurice) Squirrel RFM*
1986	WO1 J. (Jim) Wood
1988	WO2 G. McCormick
1991	WO2 S. (Stewart) Hipwell RFM
1993	WO2 P. (Peter) Bloor EM, RFM
1993	WO2 S. (Spencer) Goss
1995	WO1 R. (Rick) Hedger
1997	WO1 D. (Dave) Rundell*
1999	WO1 G. (Gordon) Templeton*
2001	WO1 J. (Jim) Davis RFM*
2007	WO2 A. (Andy) Howes
2008	WO2 A. (Andy) Howes
2009	?
2010	?
2011	?
2012	?
2013	?
2014	?
2015	?
2016	WO2 M. (Michael) Hutchinson
2020	WO2 S. (Steve) Davis (ARA)/ SGT S. (Scott) White
2021	?
2022	?
2023	?
2024	WO2 G.J. (Gerard) Van-Der-Velden
2025	WO2 G.J. (Gerard) Van-Der-Velden
2026	WO2 T. (Tim) Place

Notes:

All those notated * later served as RSM

WO2 C. (Claude) Gumley had served in WW2

WO2 R.S. (Ron) Carr EM was one of the first recruits in 105 Const Sqn in 1950 (Regt No. 3137500)

WO1 N.J.F. (Norm) Dodgson EM, RFM was one of the first recruits in 105 Const Sqn (Regt No. 3137501). He was the longest serving member of the regiment with 37 years' service.

WO2 Mike Fleming was an ex-Commando and joined 105 as a Sapper in the late 1960s. Later he was RSM.

WO1 Maurie Squirrel enlisted as a sapper in 105 in the 1960s and later was RSM before joining Pay Corps as a Captain.

WO1 Jim Davis had served in the banking industry in PNG.

WO2 Peter Bloor retired on his 55th birthday at the annual exercise in Warradale SA

WO2 Jack Muir enlisted in 1955 from the SR&WSC in Tatura. He deployed to PNG with the SR and also to Ethiopia for the Australian Government. In 2020 he was made Senior Citizen of the Year for greater Shepparton at the age of 94. He passed away on 20 May 2020 and was awarded a Medal of the Order of Australia (OAM) in the 2020 Queen's Birthday Honours List.

COMMANDING OFFICERS/REGIMENTAL SERGEANT MAJORS

– 22nd Construction Regiment (Supplementary Reserve), 22nd Construction Regiment and 22nd Engineer Regiment

COMMANDING OFFICERS

1950	LtCol I.J. (Paddy) O'Donnell ISO, OBE, ED
1954	LtCol V.G. (Vic) Swanson MID
1956	LtCol R.F. (Bob) Eastick MBE
1961	LtCol J.R. (John) Tyson
1962	LtCol R.C. (Bob) Handley ED
1966	Maj K.N. (Keith) Opie
1968	LtCol B. (Bruce) Addis RFD, ED
1972	LtCol G.W. (Graham) Marshallsea ED
1975	LtCol G.R. (Geoff) Hunt RFD, ED
1979	LtCol P.M. (Peter) Hosking ED
1982	LtCol W.J.F. (Warren) Hardy ED
1984	LtCol R.G. (Bob) Slater AM, RFD*
1987	LtCol P. (Peter) McCulloch
1989	LtCol G. (George) Giummarra RFD
1992	LtCol G. (Geoff) Spencer (February - To World Bank)*
1992	LtCol I. J. (Ian) Campbell psc (Feb-Oct)
1992	LtCol W. J. (Bill) Ross psc (from October 1992)
1996	LtCol G. T. (Greg) Burnham psc
1997	LtCol B.M. (Bruce) McClure RFD
2001	LtCol B.W. (Bill) Van Ree
2004	LtCol S. (Steve) Bell
2006	LtCol J. (John) Raike ADC
2009	LtCol C. (Cam) Smith psc, qtc (posted June 2011)
2011	LtCol D. (Darren) Potter CSC,
2014	LtCol G. (Glen) Pilbeam*
2015	LtCol M. (Michelle) McCormack psc (r)*
2018	LtCol S.M. (Sharon) Coates CSC, psc (r)*
2021	LtCol S. (Scott) D'Rozario psc (r)
2024	LtCol R. (Russell) Collins psc (r)
2026	LtCol J. (Jason) Eltham psc (RI)

Notes on CO's denoted by *(See over)

1. Lt Col Bob Slater was promoted to Brigadier and commanded LSF Engrs.
2. LtCol Geoff Spencer was seconded to the World Bank in Washington at short notice, LtCol Ian Campbell assumed command until LtCol Bill Ross took over in Oct 1992
3. LtCol Glen Pilbeam had commanded 4CER in 2012/13 and was appointed inaugural CO of 22ER on 1 Jan 2014
4. Lt Col Michelle McCormack was promoted to Brigadier in 2025 and commanded 4th Brigade. She was the first female Commanding Officer of the Regiment.
5. LtCol Sharon Coates was awarded a CSC on Australia Day 2021 for outstanding achievement as the Joint Task Group 646.2 Commanding Officer on Operation BUSHFIRE ASSIST 2019-2020

REGIMENTAL SERGEANT MAJORS

1950	Nil
1960	WO2 N.B. Giles
1962	WO2 A. Smith
1968	WO1 B.M. (Bryan Martin) James*
1974	WO1 L. French
1975	WO1 N.J.F. (Norm) Dodgson
1979	WO1 M. (Mike) Fleming
1984	WO1 I.R. Treller
1986	WO1 M. (Maurie) Squirrel
1989	WO1 W. (Bill) Fry
1992	WO1 J. (John) Printz OAM
1994	WO1 R. (Rex) Howes
1998	WO1 P. (Peter) Ferguson
1999	WO1 D. (Dave) Rundell
2000	WO1 B. (Barry) White
2001	WO1 G. (Gordon) Templeton
2005	WO1 P. (Pat) Jorna
2006	WO1 J.H.(Jim) Davis
2008	WO1 K. (Keith) Hirjee
2009	WO1 S. (Stewart) Rutledge
2010	WO1 A. (Andy) Howes/ WO1 S. (Stewart) Rutledge
2012	WO1 S. (Stewart) Rutledge
2013	WO1 S. (Steve) Atlier
2014	WO1 P. (Peter) Stanek
2016	WO1 A. (Anthony) Luchterhand OAM
2018	WO1 J. (Justin) Jones
2020	WO1 B. (Benjamin) King
2021	WO1 M. (Mark) Everingham OAM
2023	WO1 T. (Tom) Jesser
2025	WO1 C. (Clinton) Matheson

Notes on RSM's denoted by *

* WO1 Bryan Martin James was a recruit in 104 Const Sqn and rose to be RSM in 9 years. Born 15 Sep 1926. Died 4 Jan 2021 aged 94 years.

ANNEX E - ABBREVIATIONS

Note: These abbreviations encompass both military and civilian usage at various time periods throughout this history.

105 Const Sqn	105th Construction Squadron
105 Const Sqn (SR)	105th Construction Squadron (Supplementary Reserve)
105 CS	105th Construction Squadron
203 Works Sect	203rd Works Section
21 Const Sqn	21st Construction Squadron
22 Const Regt	22nd Construction Regiment
22 Const Regt (SR)	22nd Construction Regiment (Supplementary Reserve)
22 ER	22nd Engineer Regiment
3CER	3rd Combat Engineer Regiment
4CER	4th Combat Engineer Regiment
6ESR	6th Engineer Support Regiment
7CSSB	7th Combat Service Support Battalion
7FER	7th Field Engineer Regiment
7ESR	7th Engineer Support Regiment
19 CE Works	19th Chief Engineer Works
39E&M Sqn	39th Electrical and Mechanical Squadron
91 Forestry Sqn	91st Forestry Squadron
AABM	Australian Army Band Melbourne
AACAP	Army Aboriginal Community Assistance Program
AAS	Army Apprentices School
AASAM	Australian Army Skill at Arms Meeting
AC	Companion of the Order of Australia
AFX	Annual Field Exercise
AIF	Australian Imperial Force
AM	Member of the Order of Australia
ARA	Australian Regular Army
ARES	Army Reserve
BC	Before Christ
BFA	Blank Firing Attachment, or, Basic Fitness Assessment
CAPT	Captain
CBE	Commander of the British Empire
CE	Combat Engineer or Chief Engineer
CFA	Country Fire Authority
CMF	Citizen Military Forces
CO	Commanding Officer
COL	Colonel
COMD	Commander
CPL	Corporal
CRB	Country Roads Board
CSC	Conspicuous Service Cross
CSM	Conspicuous Service Medal

DACC	Defence Aid to the Civil Community
DEWLP	Department of Environment, Water, Land and Planning
DHHS	Department of Health and Human Services
DSC	Distinguished Service Cross
DSO	Distinguished Service Order
DSTO	Defence Science and Technology Organisation
ED	Efficiency Decoration
EM	Efficiency Medal
ENGR	Engineer
GP	Group
ICC	Incident Control Centre
ISO	Imperial Service Order
JTF	Joint Task Force
KBE	Knight of the British Empire
LO	Liaison Officer
LSF	Logistic Support Force
LT	Lieutenant
LTCOL	Lieutenant Colonel
MAJ	Major
MAJGEN	Major General
MBE	Member of the British Empire
MC	Military Cross
MID	Mentioned in Despatches
MM	Military Medal
MMBW	Melbourne Metropolitan Board of Works
MP	Military Police
NCO	Non-Commissioned Officer
OAM	Medal of the Order of Australia
OC	Officer Commanding
OCS	Officer Cadet School
OBE	Officer of the British Empire
OIC	Officer in Charge
PMV	Protected Military Vehicle
PNG	Papua New Guinea
PNGDF	Papua New Guinea Defence Force
PCP	Police Community Patrols
PTE	Private
PTE (P)	Private (Proficient)
psc	Passed Staff College
psc (j)	Passed Staff College (Joint)
psc (r)	Passed Staff College (Reserves)
psc (RI)	Passed Staff College (Royal Indonesia)
qtc	Qualified Technical Course
RAE	Royal Australian Engineers
RATEL	Radio Telephone Procedure
RE	Royal Engineers
REGT	Regiment
(Retd)	Retired

RFD	Reserve Force Decoration
RFM	Reserve Force Medal
RFMF	Republic of Fiji Military Forces
RHQ	Regimental Headquarters
RL	Retired List
ROPS	Roll Over Protected Structure
RSM	Regimental Sergeant Major
SEC	State Electricity Commission
SES	State Emergency Service
SIG	Signals
SITREP	Situation Report
SPR	Sapper
SGT	Sergeant
SSGT	Staff Sergeant
SR	Supplementary Reserve
SQMS	Squadron Quartermaster Sergeant
SSM	Squadron Sergeant Major
VCP	Vehicle Check Point
VICPOL	Victoria Police
VICROADS	Victorian Roads Authority
WO1	Warrant Officer Class One
WO2	Warrant Officer Class Two
WW1	World War One
WW2	World War Two
SR&WSC	State Rivers and Water Supply Commission
UN	United Nations

ANNEXE F - BIBLIOGRAPHY

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DEDICATIONS

This History is
Dedicated to all Sappers of Victoria, their friends & family, and all those who have served our Nation and greater Humanity

Facimus et Frangimus

(We make & we break!)

Dedication

Special mention goes to a long-term friend of the RAE Association, Zeus, our faithful mascot for over 10 years, passed away on 8th November 2025.

Zeus was the assistance dog for our current President Don Hughes and will be greatly missed by all. Our condolences go to Don and his family and for many fond memories of his time with us.