

The  
Royal Australian Artillery  
**LIAISON LETTER**

---

2021 - Edition One



 SPEAR of FAME

The Official Journal of the Royal Regiment of Australian Artillery  
Incorporating the Australian Gunner Magazine

---

First Published in 1948



# RAA LIAISON LETTER

2021 Edition One

Incorporating the  
Australian Gunner Magazine

## CONTENTS

Editors Comment	1
Representative Colonel Commandant	3
Head of Regiment	4
Regimental Master Gunner	5
Regimental	15
150th Anniversary Events Calendar	31
Around the Regiment	37
Fire Plan Modification	57
Professional Papers	65
Cannonball History & Heritage	87
Associations & Organisations	117

### NEXT EDITION DEADLINE

Contributions for the *RAA Liaison Letter 2021 – Edition Two* should be forwarded to the Editor by no later than **Friday 30th July 2021.**

### Liaison Letter on-line

The Liaison Letter is on the DPN and can be found on the Head of Regiment - Royal Regiment of Australian Artillery (RRAA) Share Point Page:

<http://drnet/Army/RRAA/PublicationsOrders/Pages/Publications.aspx> It is also available on the Royal Australian Artillery Historical Company (RAAHC) & Australian Artillery Association websites.

### Publication information

Front Cover:	Miniature of new Banner of Queen Elizabeth II, our Captain General, and Coral / Balmoral UCG Ribbon,
Front Cover Theme by:	Major DT (Terry) Brennan, Staff Officer to Head of Regiment
Compiled and Edited by:	Major DT (Terry) Brennan, Staff Officer to Head of Regiment
Published by:	Lieutenant Colonel B (Ben) Gray, Deputy Head of Regiment
Desktop Publishing:	Major DT (Terry) Brennan & Assisted by Michelle Ray (Honorary Desk Top Publisher)
Front Cover & Graphic Design:	DT (Terry) Brennan
Printed by:	Defence Publishing Service – Victoria
Distribution:	For issues relating to content or distribution contact the Editor on email: <a href="mailto:terry.brennan59@yahoo.com.au">terry.brennan59@yahoo.com.au</a> or <a href="mailto:terry.brennan@defence.gov.au">terry.brennan@defence.gov.au</a>

Contributors are urged to ensure the accuracy of the information contained in their articles. The Royal Australian Artillery, Head of Regiment, Deputy Head of Regiment and the RAA Liaison Letter editor accept no responsibility for errors of fact.

The views expressed in the Royal Australian Artillery Liaison Letter are the contributors and not necessarily those of the Royal Australian Artillery, Australian Army or Department of Defence. The Commonwealth of Australia will not be legally responsible in contract, tort or otherwise for any statement made in this publication.

# Australian Gunners

(Serving or Retired)



**YOU ARE INVITED TO  
CELEBRATE THE**

## **150th Anniversary of Australian Artillery in 2021**



**Mark Your Diary**

## **National Events**

Where: Canberra, Venues - RAA National Memorial & AWM

**WHEN: SUNDAY 1ST AUGUST 2021**

Where: Sydney, Venue - Victoria Barracks

**WHEN: SATURDAY 6TH NOVEMBER 2021**

**Note:** More detailed information including timings will be provided when available throughout 2020 and 2021

### **Unit & Association Events**

Throughout 2021 as advertised by those individual coordinating organisations.

## **CANBERRA**

**1st August 2021**

Commemorative  
Service at RAA  
National Memorial  
**Mount Pleasant**

Synchronised  
National Ceremonial  
Fire Plan

**Mount Pleasant & all  
RAA Unit Locations**

Last Post Ceremony  
**Australian War  
Memorial**

## **SYDNEY**

**6th November 2021**

Formal Parade & Drum  
Head Service

Incorporating the  
presentation of a new  
Queen's Banner

**Followed by**

**150th Cocktail Party  
Victoria Barracks**

## **FURTHER INFORMATION**

**Contact**

**RAA HOR Staff**

**via email at**

**raa.hor @defence.gov.au**



# REGIMENTAL FAREWELLS NOTICE

## OFFICERS LEAVING THE ROYAL REGIMENT AFTER 20 OR MORE YEARS OF SERVICE

If you wish to be formally farewelled from the Royal Regiment you must provide your post Army contact details (prior to separation) to the SO to HOR (Major DT (Terry) Brennan).

Whilst it is appreciated transition from military life to civilian life is a very busy period if you do not provide your contact details it is highly probable that you will not receive an invitation to be farewelled. **This not because the Regiment does not wish to farewell you – it is simply that the HOR staff does not have visibility of when you leave the Army or your post-service contact details.**

**Eligibility:** Full-Time and Part-Time officers who have completed 20 or more years effective service.

**Options:** Full-Time officers who, after 20 plus years' service, transition to Part-Time service may elect to be farewelled at the end of their Full-Time service rather than wait until they have fully retired – It is entirely up to you. Please advise HOR staff of your intention as part of your transition.

### **Information required:**

- Full-Name
- Postal Address (non-military)
- Email (non-military)
- Mobile (non-military)

SO to HOR can be contacted on:

Email: [terry.brennan59@yahoo.com.au](mailto:terry.brennan59@yahoo.com.au) and/or

Email: [terry.brennan@defence.gov.au](mailto:terry.brennan@defence.gov.au)

Mobile: 0419 179 974

NOTE: YOU ARE ENTITLED TO ONLY ONE REGIMENTAL FAREWELL

## WARRANT OFFICER & SNCO FAREWELLS

For further information on eligibility etc contact the Regimental Master Gunner - WO1 David Nutini.

Mobile: 0408 604 596

Email: [david.nutini@defence.gov.au](mailto:david.nutini@defence.gov.au)

## JNCO & GUNNER FAREWELLS

JNCOs & Gunners who have served for 20 plus years should be farewelled under local unit arrangements. HOR staff should be contacted to arrange for a Regimental Cypher to be sent to the unit concerned for framing and presentation.

## IMPORTANT NOTICE

### THE NEXT

Regimental Officer Farewells  
are planned for February 2022.

**IMPORTANT ACTION REQUIRED IF YOU WISH  
TO BE FAREWELLED NEXT YEAR CONTACT  
SO TO HOR ASAP**



AUSTRALIAN WAR MEMORIAL ARTV05167

**A GUNNERS FUND SUBSCRIPTION FORM  
IS LOCATED IN THE ASSOCIATIONS AND  
ORGANISATION SECTION**



A CALL FROM THE RAA GUNNERS' FUND



*"Coo-ee-  
Won't YOU  
JOIN?"*

**SUBSCRIBE NOW**

Printed by Authority of the OFFICE OF INFORMATION OF THE COMMONWEALTH. ——— ST. LEONARD & CO. LTD. LITHOGRAPHERS, SYDNEY.

# Editors Comment



Welcome to the latest edition of the Liaison Letter. We have a good cross section of reports and articles from the Regiment's as well as a diverse range of Professional Papers. I thank those units and

individuals who have made the effort to contribute, your support is appreciated.

I have received feedback from Gunners with a range of ranks and backgrounds expressing their disappointment at the delinking of the Cannonball Journal from the Liaison Letter. Remembering that to move forward successfully, you must keep one eye on history in order, to learn from it and avoid repeating the same mistakes or bad decisions. To this end there will be a history and heritage section included in this and future editions. Cannonball will continue as an electronic edition and be available on the RAAHC website. The decision to remove the Cannonball is sad from the perspective that history is an important component of our professional development regardless of rank.

Last year just prior to COVID I was chatting with a senior Gunner officer and reflecting on my 42 years combined service and the changes I have observed and/or experienced. The senior officer to whom I was lamenting, said to me with a wry smile "Terry ... what you are experiencing is generational change." On reflection, I believe it is more than that ... I have served through and experienced fundamental generational and structural change before ... this time I think it is more than that ... it is a "cultural shift" far beyond generational change.

I accept that throughout the centuries society and its "culture" has continuously evolved to reflect the ever changing values, morals, and standards of the day. Each generation has its turn to put their stamp on it, sometimes for the better, whilst occasionally for the worst. This evolution and rethinking are healthy, however as part of the "profession of arms" (which incidentally I was told on my graduation parade in 1979 was the second oldest in the world by the guest speaker) we as Gunners have a rich heritage and

long established traditions that have transcended the generations to underpin our individual and collective humanity and helped us survive the stresses of what our Government may ultimately asked of us .... kill in combat. How we prepare for this challenge is by maintaining and building on our esprit de corps, comradeship and having a proud sense of what it means to be a Gunner. We must ensure that as our Gunner culture changes, and it most certainly will as day follows night, it does affect all aspects of how we conduct ourselves and perform as Gunners. The mantra from a Regimental perspective, that is .... "Once a Gunner always a Gunner" is critical in ensuring this outcome.

---

***How we prepare for this challenge is by maintaining and building on our esprit de corps, comradeship and having a proud sense of what it means to be a Gunner.***

---

Whilst as a young officer I probably did not fully appreciate what an honour it was to have been allotted to the Royal Regiment on graduation, over the years I have grown to develop a deep sense of pride in what "Once a Gunner .... Always a Gunner" really meant. These days with our combined, and joint operations and combined arms groups / teams etc we must not take our eye off the fact that we are Gunners first and foremost. We must embrace every opportunity to differentiate ourselves from the other Arms and Services and reinforce to everyone that we are Gunners, who have a proud, and unique history with strong traditions.

You may think I am being a little precious, I am not, I am just concerned that we are in danger of allowing our Gunner traditions and standards to blur to such an extent that they will become indistinguishable from the rest of the Army. When I served with the Royal Australian Air Force as a Ground Liaison Officer in the mid 1980's I used to joke with my "blue" friends that it appeared to me that if the Air Force did something twice it became a tradition as they had so few on which to rest their caps. We must not allow this to happen and let ourselves to be influenced by other Corps and their sometimes recent traditions as we have such a long and rich history of our own already. Let us all strive to keep it that way.

Speaking of quirky traditions, I was pleased to see the outgoing Commanding Officer refer to 1st Regiment as the “Premier Regiment”. I did three postings with the Regiment in the 1980’s and early 1990’s ... and we proudly referred to ourselves as the “Premier Regiment”. Unfortunately, since that period there has been a couple of determined attempts by commanding officers to stop people referring to the “Premier Regiment”. It can rightly claim to be the “Premier Regiment” if only for the simple reason that when it was raised as part of the permanent Army in the late 1940’s, it was the only artillery unit in the new standing Army. I personally believe it is the “Premier Regiment” for a raft of reasons.

I remind everyone this year is the 150th anniversary of the establishment of a permanent Australian artillery presence. There is a range of events and initiatives by units, associations, and other organisations such as museums occurring throughout the year. There is a section in this edition with information that may be useful.

---

***... this year is the 150th anniversary of the establishment of a permanent Australian artillery presence.***

---

The key Royal Regiment events sponsored by Head of Regiment are on 1st August in Canberra and 6th November at Victoria Barracks in Sydney. In Canberra there will be a commemorative service at the RAA National Memorial on Mount Pleasant and a Last Post Ceremony at the Australian War Memorial. As well there will be a nationwide synchronised salute firing a total of 150 rounds. In Sydney there will be drumhead service, the occasion being the presentation of a new Queen Elizabeth II banner to the Royal Regiment. This will be followed by an all ranks cocktail party in the grounds of Victoria Barracks. Please see the advertisement in this edition for more details.

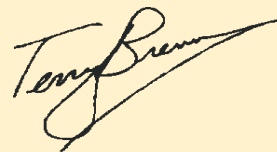
Unfortunately, due to the vagaries of COVID 19 the sensible decision was taken to cancel the Regimental farewells. I hope that by the time next year comes around we will all be vaccinated and COVID safe meaning we will be able to hold memorable farewells.

My final missive is on subscriptions and need to keep them being made to the Gunners Fund. I spoke recently with the Treasurer, Major Gary

Down, regarding this matter. He observed that from his perspective he would prefer people consider paying for a life subscription rather than a fortnightly or annual one. The key reason behind this is that despite the best intentions of those who sign up for annual contributions often forget to contribute in the subsequent years; and those who contribute fortnightly often change banks or financial circumstances and do not renew their contribution. Life Subscriptions also make the management of the Gunners Fund less cumbersome and time consuming. It is worth noting that Major Down’s appointment is now a Reserve position which means the more efficient he can be with his time the more he can contribute to the HOR Cell.

Once again thank you to everyone who has contributed. Please make every effort to attend a least one or more of the many 150th anniversary events planned in your area or the national events in Canberra and/or Sydney.

*Ubique*



DT (Terry) Brennan  
Major

Email: [terry.brennan59@yahoo.com.au](mailto:terry.brennan59@yahoo.com.au)

Email: [terry.brennan@defence.gov.au](mailto:terry.brennan@defence.gov.au)

Mobile: 0419 179 974

## CAN YOU HELP

The Pagan Cup remains elusive – Information regarding its whereabouts would be most appreciated. Originally the Cup was linked to AD units in 2 MD. When last competed for (due to the demise of AD in 2 MD) the rules were amended and linked to the Gordon Bennett Trophy (the G-B was amended to battery gunline performance) and the Pagan Cup (rules were amended for the OP). The last record of it being awarded was to 1 Battery, 23 Field Regiment in 1974-75.

Heath Trophy – This was for ‘attendance’ which today can be interpreted as recruiting / retention. HOR staff have no idea where it is currently located.

If any reader knows the whereabouts of these trophies be part of reinvigorating our heritage and advise HOR staff HOR appreciates any assistance in locating the awards.

Contact Major Gary Down or Major DT (Terry) Brennan.



# Representative Colonel Commandant

*Brigadier S (Don) Roach, AM*

Greetings fellow gunners,



A belated welcome to 2021 and I hope the year has started on a positive note for you all after the disruptions of the year that was 2020.

I note that a degree of normality has returned to The Regiment with

‘rounds down range’, collective training returning for the units, and the individual courses schedules looking a little more familiar. We do however continue to feel some of the disrupting effects of the COVID-19 pandemic.

I would like to make special mention of all members of the Regiment who have been involved in the various task forces providing support to the national COVID-19 effort. Whether this was supporting border controls in conjunction with police, monitoring and assisting with hotel quarantine and transportation, facilitating medical and/or contact tracing or other headquarters and logistic support you have made a significant and notable contribution to the overall ADF support to the Australian community. It has been unusual but certainly something of which you can all be truly proud.

The Regimental Conference was impacted and consequently was conducted in early March, but in Canberra and without the coincident convening of the Regimental Committee meeting. I am advised it was a successful conference with a proper focus on the many significant transformative challenges that we are facing as the RAA. The Regimental Committee has been rescheduled and will now occur within the next three months.

The profile of the RAA remains high and having just attended the Chief of Army’s Symposium in Brisbane it remains extremely positive that the Chief and his senior leaders continue to talk very positively about Joint Effects, Protected Mobile Fires, Long Range Fires, the Ground Based Air

Defence system, the Guided Weapons Enterprise, UAS, Remote Autonomous Systems and Artificial Intelligence – all with significant implications, opportunities and impacts for the RAA.

I have recently written to our Captain General offering our deepest condolences to Her Majesty, and all members of the Royal Family on the death of His Royal Highness, The Prince Philip, Duke of Edinburgh. His Royal Highness’s life was one of service, devotion and duty that will remain an enduring legacy and worthy example to us all.

The activities for the 150th anniversary commemorations continue to progress in planning with Regimental and local unit planning teams preparing unique and appropriate plans to mark the occasion around the country. It will of course also be a truly national endeavour, highlighted with the 150 round salute national fire plan. Just to remind you the other notable activities and events planned to commemorate this special year include:

- Last Post Ceremony at the Australian War Memorial at which Corporal Frank Oswald Matt DCM (WW1) Service No 812, a gunner of special note has been selected from the Roll of Honour to mark the anniversary and to recognise and pay tribute to all fallen gunners.
- Presentation of the new Queens Banner and the RAA Captain-General’s Sword to be carried by the Banner Ensign in-perpetuity.
- Presentation by RAAHC of the ANZAC Centennial Gun to Army and recognition of the work of the volunteers from the ACG project.
- Painting Commission by David Rowland. The subject being two actions, within sight of each other. Lieutenant Lawrence Thurnhill MC and detachment from 6 Battery 2 FA Bde, direct fire action at Pozieres; and Corporal Frank Matt DCM of the Trench Mortar Battery, who kept his mortar firing single-handedly until killed on 23rd July 1916 at Pozieres.
- Activities of all our Artillery Associations
- St Barbara’s Day events to mark our 150th year.

I would like to make mention of the two members of the RAA who were recognised in this year's Australia Day Honours list. Brigadier Dave Kelly was awarded the DSM for Distinguished Leadership as the Chief of Operations in Operation Resolute Support in Afghanistan. An outstanding performance in a demanding coalition role. Warrant Officer One John Franklin was awarded the OAM for Meritorious Service as the Band Sergeant Major of the RAA Band. Congratulations to both Dave and John. As a special mention, for those of us who know John which I might add is most of The Regiment, he has been an outstanding member of 'our band' over many years and in many guises, including as Hornblower and as Bandmaster twice. The award is due recognition of his outstanding commitment. Well done John. As we prepare for the year of celebrations in 2021, including the 61st birthday of the 4th Regiment and the series of commemorations of our 150th anniversary in August and November the RAA band will be busy, and I look forward to their upcoming support performances and wish them well for a great year ahead.

---

***It has been unusual but certainly something of which you can all be truly proud.***

---

2021 is a Talisman Sabre year and for all of those involved I wish you good luck for the lead up and preparation training and for what will no doubt be another variation of this unique combined training event. More broadly, as we continue to return towards normalcy in our training, our capability development and our preparations and introduction into service of the full range of new and exciting capabilities I wish all members of the Regiment a safe and professional experience.

This 150th year will be a great year to mark our history and heritage and to enjoy the celebrations to mark the service of all gunners throughout the life of The Regiment. I encourage all current and former serving gunners, our friends, and families to embrace and enjoy the events of this special year.

*Ubique*

---

## Head of Regiment

*Brigadier RA (Richard) Vagg, DSC*

Fellow Gunners,



What an eventful period we have had since the last Liaison Letter! The first thing I want to say is how pleased I am to see our guns, missiles and UAS back out in the field again. After the disruptions of last year and the

cancellation of major exercises, seeing the footage of gunners from 1st Regiment RAA engaging missions in torrential rain and getting covered in mud made me long to be in a battery again – but then again, I am currently serving in Russel Offices! If you have not seen it for yourself, go over to their Facebook page and have a look. Unit Facebook pages are a great way to keep up with what each of the regiments is up to and spread the good word about what we have been busy doing.

The start of March saw the Regimental Conference occur not in its traditional home at the School of Artillery, but in Canberra, primarily due to travel restrictions. Whilst we regretted missing out on visiting the School again, having the conference in Canberra afforded us the opportunity to have a much broadened, and much more influential range of attendees. The proximity to AHQ and JOC afforded strong attendance from RAA and non-RAA senior officers and their buy-in and knowledge is critical as we shape the RAA of 2021 to be the RAA of 2040. Various non-RAA senior officers were very effusive in their praise of the RAA for its renowned technical excellence and the great work our people are doing. Importantly, the groundwork is being rapidly laid for our future tactics, trade models, facilities, and force structures.

The work elements the Regiment have completed supporting the Nation's efforts to combat the effects of COVID-19 and helping fellow Australians during the recent NSW floods. This was attained whilst maintaining your respective levels of readiness and

preparedness, on the back of the 2019/2020 bush fires, which has been inspiring. I am fully aware of the effect that this has had on you as a serving member, but also that of your families and loved ones. On behalf of Army, thank you for all your work and the sacrifices you and your family have had to make. It is greatly appreciated.



**104 Battery gunners at Wide Bay during Exercise Nuille, March 2021.**

As you would all be aware, 1st August 2021 will be a major milestone for the RAA. As we become ever more future-focussed, these 150th Anniversary celebrations offer Gunners, both serving and veteran, a rare chance to reflect and celebrate our history. We as a Regiment have the unique opportunity to celebrate 150 years of service and sacrifice to our Nation from everyone who has had the privilege of wearing a Gunner hat badge over that period. From humble beginnings at Victoria Barracks in Sydney with 9-pounder guns, the RAA has evolved into a large and lethal organisation optimised for fighting across domains as part of the Joint Force. With Australian Gunners having served everywhere from Sudan in 1885 up to and including current theatres, the RAA truly has earned the honour ‘Ubique’. At 1200 h on 1st August, as 150 rounds are fired during the National Fire Plan to commemorate the 150 years, I encourage all of you to reflect on that history and take pride in the part you have played in making the RAA what it is today, and the part you *will* play in the Regiment’s future.

*Good shooting.*



**Head of Regiment Coin**

## Regimental Master Gunner

*Warrant Officer Class One D (David) Nutini*

*“All of the real heroes are not story book combat fighters either. Every single person in this Army play a vital role. Don’t ever let up. Don’t ever think that your job is unimportant. Every person has a job to do and they must do it. Every person is a vital link in the great chain.” George S. Patton.*



Last year was interesting to say the least. Despite the current disruptions and restrictions, the challenges of the RAA Trade and Training Cell again have been many, with short notice tasks arriving weekly. As most of

the Combined Arms and Training Centre continues to be spread across Australia working from home, a heavy reliance on daily GovTeam meetings has become the normal way of doing business for the cell.

That said, 2020 saw the RAA TT Cells’ main effort focused on the development of the COA’s for the Workforce Segment Review as part of the Land Combat Capability Review. This review is in anticipation of the introduction into service of incoming land combat capabilities such as L119-7B (NASAMs); L8116 (Protected Mobility Fires); L8113 (Long Range Fires). The review will examine combat force structures and employment categories to ensure they are aligned to the change in our equipment, technology and operating environment. Overall, this will ensure that our Combat Arms are designed and structured to generate a land component capability that is future ready in support of the joint force or independently in the land domain.

As part of our daily business, the cell has approved and recommended 14 applicants across the four RAA trades, which have been presented at the Lateral Transfer Board of Studies. The Training Design Cell remediated 43 RAA LMPs



including Land Range Safety and the Small Arms Coaches Course LMPs.

The Offensive Support Trade Manager (TM) has been working in conjunction with the RAA Training Designer and the School of Artillery in the development of the new Digital Safety Officer Course Learning Management Package (LMP).

Due to travel restrictions, the cell was required to release the Subject 4 SGT / WO course LMPs in order for individual Regiments to conduct promotion courses within their current location. This was a great initiative driven by CATC and the School of Artillery thus preventing a backlog of RAA members requiring promotion courses.

The AMDS TM continues with attending a number of capability workshops aligned with LAND 19 -7B introduction into service of the NASAM. The UAS TM has submitted the request for the closure of Implementation Plan (IP) 05/16 and 06/16, which has seen all members effected by the IP, remediated and retaining their current pay groups. Support to the Land 129 SUAS+ planning and employment specifications continues with AHQ.

Additionally, the cell also been involved with the following project working groups:

- L8813-1 Long Range Fires (which is still at the pre-gate 0)
- L17-1C Future Artillery Ammunition
- 81mm Mortar Safety Systems Working Group

As a reminder, 2021 will be the 150th Anniversary of the Royal Regiment of Australian Artillery. The confirmed key events that will be conducted in 2021 are as follows:

1st August 2021: A Memorial Service at the RAA Memorial, Mt Pleasant ACT including a National 150 round Gun Salute. Additionally, a Gunner is to be commemorated at The Last Post Ceremony at the Canberra War Memorial.

6th November 2021: Drumhead Service for the presentation of the new Banner of Queen Elizabeth 11 followed by an evening Cocktail Party at Victoria Barracks.

These events will be open to all members of the RAA, guests and associations to attend.

As part of the 150th Anniversary, the company Spear of Fame has offered to manufacture 200 miniature framed Queens Banner. This is an exact replica of the new Queen's Banner (1871-2021) that is to be presented to the Royal Regiment in Sydney on 6 Nov next year. Please see below an image of the framed Miniature Queen's Banner that the manufacturer (Spear of Fame) is offering at a cost of \$520.00 each (\$560.00 with CORAL BALMORAL Streamer).

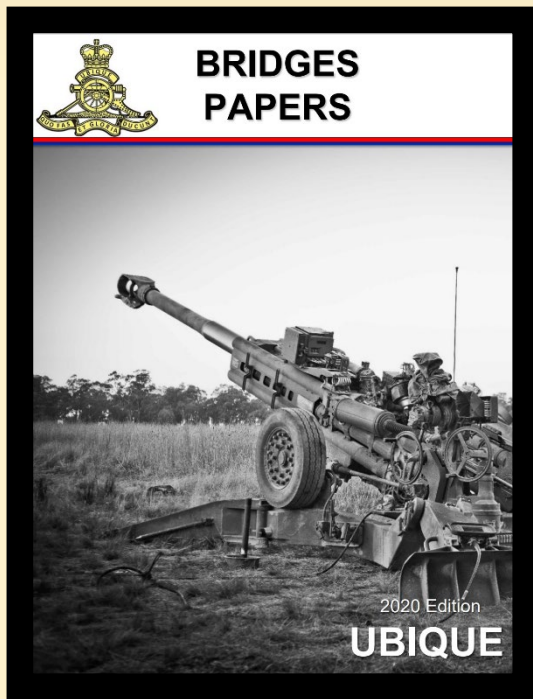


The size of the framed banner is 320mm x 370mm and will include an individually stamped, signed and numbered certificate. Once all 200 Miniature Banners have been sold they will no longer be available. An account has been set up by the RAA Trust Fund to allow members to pay for the Miniature Queens Banner over the next nine months. For further details please email the RMG: david.nutini@defence.gov.au.

On behalf of the RAA we thank you for your dedicated service and support to Domestic Operations throughout the Nation. Most importantly, we wish you and your families a Merry Christmas and a very well-deserved rest over your leave period.

Finally, I would like to congratulate the newly appointed Commanding Officers, Regimental Sergeant Majors, Master Gunners, Battery Commanders and Battery Sergeant Majors and wish them every success in their appointments. I would also like to congratulate the members of the Regiment who were recognised in the 2021 Australia Day Honours and Awards. Good Soldiering.

*Ubique*



## BRIDGES OCCASIONAL PAPERS

*Lieutenant Colonel Ben Gray  
Commanding Officer School of Artillery  
Deputy Head of Regiment*

THESE PAPERS ARE ESSENTIALLY DESIGNED TO BE A MECHANISMS TO DRAW FORTH IDEAS AND RUMINATIONS ON FUTURE ARTILLERY AND JOINT EFFECTS CONCEPTS FROM THE MORE JUNIOR CADRE OF OFFICER, NCOS AND SOLDIERS IN THE RAA.

### Background

This is not just another call for academic papers or pseudo-intellectual discussion, the intent is very specifically to collect practitioner developed ideas, concepts, and recommendations. My goal is to provide a forum for otherwise, crazy, outlandish, and blasphemous ideas, to throw them around, to rip apart concepts, slay sacred cows and for individuals to submit their own outlandish or inventive ideas for consideration.

The intent is to gather a range of perspectives, ideas and concepts from informed practitioners (bottom-up refinement) to drive future structures, tactical methods and culture, via working/discussion papers addressing new methodologies, structures, approaches along

doctrinal, personnel, technology, capability and conceptual lines.

I genuinely want people to take the gloves off, strap in and challenge the way in which we think artillery fights as a system and to make recommendation on how we are doing things right or we can do it better.

I encourage everyone in the unit to take the opportunity to write something.

### Objective

The objective of the Bridges Occasional Papers is to harness the collective skills, knowledge, and experience of the wider RAA with a focus on future artillery and joint effects concepts. These collective documents will be used to inform and guide modernisation, structure, and employment concepts into the future.

---

## BRIDGES PAPERS 2021

### CALL FOR SUBMISSIONS

### TOPIC: FUTURE ARTILLERY & JOINT EFFECTS

### Topics and Scope

As per last year there is no specific theme to be pursued by potential authors, however this is an opportunity for all Gunners challenge themselves with a piece of writing centred around conceptually provocative theme, encouraging thought and debate on a wide range of challenging and interesting ideas beyond the confines of the current and to advance new and inventive concepts. The intent is to allow people (of all ranks) to flex their intellectual conceptual muscles, they are encouraged to identify structural, procedural, cultural issues, identify holes in doctrine and capability and ways to fix them, and to delve into areas where normally they may expect to be dissuaded. Innovation and originality will be celebrated, they should be looking to address previous taboo concepts,

challenging norms and established truisms, submitting outlandish or inventive ideas for consideration. Authors are should be looking to bold, explore ideas outside of the norm to spark debate and innovation – slay sacred cows, put old ideas to the sword and gaze into the future on how we will look in 2030 and how we need to situate ourselves to be able to fight. To inspire potential writers, I provide the below prompts (but no one should feel constrained to these options):

- Assess how the RAA may surge, group, or organise to conduct large scale combat operations.
- What options does the RAA as a smaller, though capable, land-based fires apparatus have to counter larger forces?
- How can we best prepare (raise, train and sustain) members of the RAA for unified domain operations as part of joint and coalition operations?

## Entry Requirements

Entry is open to all Gunners of any rank. Each paper should address future artillery and joint effects concepts and must be between 2000-5000 words (not counting diagrams, tables of data, footnotes, bibliography or authors biography). Papers of high distinction, innovation and originality may be submitted to the Army Journal or like publications.

## Format and Style

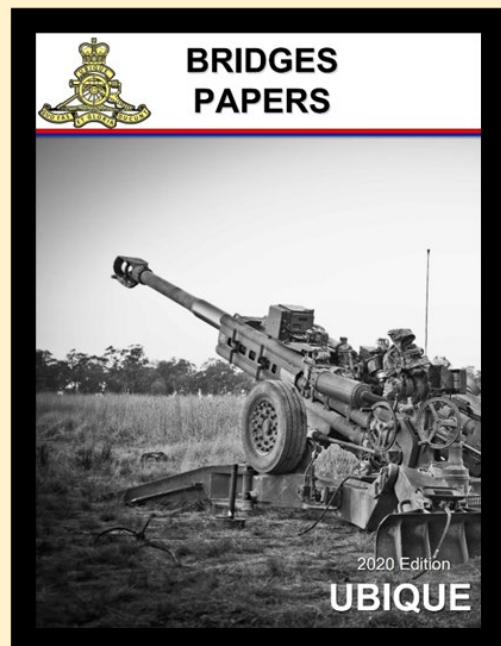
- Submission should be in Microsoft Word for ease of coalition and editing
- 1.5 line spacing / 2.5cm margins on all sides
- 12-point Times New Roman
- Automatic word processed endnotes, table and figure captions and cross-references
- Australian spelling (e.g., -ise not -ize)
- Use endnotes or footnotes rather than Harvard style in-text referencing

## Submission Requirements

I request that all papers are collated at the Regimental levels are reviewed by COs, with appropriate coaching/tuition and minor editing provided to get the submission at a high standard. Following this they then should be submitted to myself for collating. I will likely send some of them back out for independent review and comment if required, or have them assessed by other SME. Once all submissions, have undergone review, amendment, and selection I will pull them together into something that looks like the Army Journal.

## Key Submission Dates

- 25 June 2021 - Submission to COs for review
- 30 July 2021 - Submission to CO SoArty for collating and editing
- 20 August 2021 - Submission to HOR for endorsement
- TBC – Publish / Release





# BRIDGES PAPERS

## 2020 RESULTS

### TOPIC: FUTURE ARTILLERY & JOINT EFFECTS

#### Introduction by Head of Regiment

The objective of the first iteration of the Bridges Papers was to harness the collective skills, knowledge, and experience of the wider Royal Regiment of Australian Artillery with a focus on future artillery and joint effects concepts.

There was no specific theme to be pursued by potential authors, the only guidance was that this was an opportunity for all Gunners to challenge themselves with a piece of writing centred around conceptually provocative themes, encouraging thought and debate on a wide range of challenging and interesting ideas beyond the confines of the current, and to advance new and inventive concepts. Authors were encouraged to identify structural, procedural, cultural issues, identify holes in doctrine and capability and ways to fix them. Fictional, historical, tactical, and cultural pieces are also encouraged, things that break away from traditional unit establishments or question conventional techniques.

While platforms and equipment are important, the people are the true capability of the Regiment and the intellectual and moral energy they bring. The introduction of new capabilities and equipment will bring forth new challenges, and the tempo of training, operations and capability development will not decrease. Channelling the ideas and innovation of new generations of Gunners is a significant part of future force structure, the adoption of new training approaches and how impending capability acquisitions are absorbed into the joint fires system. **The Bridges Papers are a step towards providing an avenue for the bottom up advancement of ideas and concepts.**

#### Papers Published

The Bridges Papers 2020 | Future Artillery and Joint Effects are now published on The Cove.

There was an extremely solid effort from all contributors and indicative of the high quality junior leadership of the RAA.

Link: <https://cove.army.gov.au/article/bridges-papers-2020-future-artillery-and-joint-effects>

#### Subjects of Papers

- RAA Concept of Employment 2030 – By the Officers of the 105th Battery
- Ready Now, Future Ready - By MAJ Benjamin White
- Accelerating Towards Success - By CAPT Richard Lever
- Battlegroup Joint Fires and Effects De-Confliction and Airspace Control -By CAPT Benjamin May, FLTLT Ebrahim Tabandeh and LT Jack Cailles
- Consideration for Psychology in Artillery Effects Orchestration - By CAPT Jason Kirkham
- An Australian neglect of contemporary field artillery - By CAPT Pietro Ruggeri
- Artillerie Lehr - By LT Thomas Barr
- The RAA Offensive Support junior officer employment model is all wrong! - By MAJ Kevin Pamerter, CAPT Andrew Martin, CAPT Michael Robinson, CAPT William Ryan and LT Craig Hogendyk
- The Offensive Support Junior Officer Career Progression is Wrong - By MAJ Nicholas Clarke
- The RAA Driver Training Continuum - By CAPT Oscar Dyer and WO2 Kayne Falconer
- Implementation of Fitter Armament skills into ECN 162 Artillery Gunner Training - By LT Amy Hannigan
- Logistics in a Multi-Role Artillery Regiment - By MAJ Nicholas Allen and CAPT Timothy Prier

- Artillery 2030 - By CAPT Stephen Bowles
- Lessons from Antillia - By CAPT Danijel Roksa, CAPT Declan James, LT Cameron Stewart, LT Lachlan Colquhoun and LT Douglas Bell
- The Race to Manus - By LTCOL Mark Mankowski

## Head of Regiment: Comment on Self Propelled Howitzer Announcement

This morning the Government announced that it would release a sole source limited tender to Hanwha Defence Australia, to build and maintain 30 Self-propelled Howitzers and 15 armoured ammunition resupply vehicles <https://www.minister.defence.gov.au/minister/linda-reynolds/media-releases/request-tender-release-protected-mobile-fires>

This will be an important capability for the ADF, Army and specifically RAA. In this forum, I would like to thank Andrew Langford, Jon Abundo, Matt White and Hugh Smith from AHQ; and the CASG Team of Shaun Hoffman, Jon Mclean and Annett O’Sullivan whose excellent work over the last 17 months has enabled Government to make this important decision.

It is important to note that Land 8116 – Protected Mobile Fires is the second key building block in the broader Artillery Modernisation. The first being Land 19-7B – NASAMs to be fielded in the next couple of years. Land 8116 – Protected mobile fires will be followed by Land 8113 – Long Range Fires (A HIMARS type capability) and Land 129 Ph 3 – Shadow replacement. Supporting systems and FIC such as an ammunition modernisation program and a next generation Digital Terminal Control System are also in train and will be delivered in the coming years.

The full details can be found in the Artillery Modernisation Program that will be published over the coming months.

*Ubique*

## Department of Defence Ministers

### Request for Tender release for Protected Mobile Fires

3 September 2020

#### JOINT MEDIA RELEASE

- Minister for Defence, Senator the Hon Linda Reynolds CSC
- Minister for Defence Industry, the Hon Melissa Price MP
- Senator for Victoria, Senator the Hon Sarah Henderson

The Morrison Government’s 2019 election commitment to build 30 self-propelled howitzers, creating up to 350 jobs, is progressing on schedule with the release of a Request for Tender in September 2020 for the Protected Mobile Fires project.

The Request for Tender will be released to preferred supplier Hanwha Defence Australia, to build and maintain 30 self-propelled howitzers and 15 armoured ammunition resupply vehicles, and their supporting systems. Minister for Defence, Senator the Hon Linda Reynolds CSC said it marks a key step in progressing the project.

“Through this project, this Government is delivering the capability Army needs while creating local jobs in and around Geelong that will grow our highly skilled workforce,” Minister Reynolds said. “This comes at an important time as Victoria deals with its latest outbreak of COVID-19.

“The acquisition of this capability will provide the ADF with the mobility, lethality and protection required to support Joint Force operations in the land domain. “The self-propelled howitzers will be built in the Geelong region, with ongoing deep maintenance conducted in the same Australian facility to support the systems throughout their service life.”

The Request for Tender will progress this first phase of the Protected Mobile Fires capability.

Together with the subsequent phases announced in the 2020 Force Structure Plan, it will ensure a long-term future for industry’s involvement in the delivery of this critical capability for the ADF.

Minister for Defence Industry, Melissa Price said the Morrison Government is committed to maximising opportunities for Australian industry.

“This project builds on our efforts to strengthen Australia’s Defence industry capability and represents a program of continuous investment well into the next decade in the Geelong region,” Minister Price said.

“This project is expected to create up to 350 jobs to build and maintain the new vehicles. It will also provide significant opportunities in other areas such as transport and warehousing, as well as component manufacture and repair.

Senator for Victoria, Sarah Henderson said opportunities in the local Geelong area extend through the supply chain.

“These opportunities will include future mid-life upgrades, harnessing emerging technologies to enhance the protection, firepower and mobility of Australia’s protected mobile fires capability,” Senator Henderson said.

“The announcement of this next important stage of the Howitzer Defence Project is wonderful news for the people of Geelong and our city’s manufacturing sector.”

LAND 8116 Phase 2, announced in the 2020 Force Structure Plan, is anticipated to commence in the late 2020s, delivering additional Protected Mobile Fires capability, and LAND 8116 Phase 3 is anticipated to commence in the mid-2030s, delivering a mid-life upgrade that will provide an opportunity to incorporate emerging technologies.

## **Message from Chief of Army, Lieutenant General Rick Burr, AO, DSC, MVO**

1 October 2020

Technology, geopolitics, and a pandemic are rapidly changing Australia’s strategic context. Australia has stepped up and is responding to this challenge. Defence is supporting this national response through an updated Defence Strategy and new Force Structure Plan, announced in July by the Prime Minister and Minister for Defence. Australia’s Defence Strategy employs military power to shape the strategic environment, deter actions against our interests and, when required, respond with credible military force.

Defence prepares and employs combinations of land, sea, air, space, cyber and information power to shape, deter and respond. Army contributes to each of these types of military power. Australia will employ military power in the immediate region, globally and domestically, often at the same time.

Operating across environments and domains is normal for Army. We have been doing this for all of our history, in some way. Most recently, we have made sustained and significant contributions to peacekeeping and multinational operations in Africa, Asia and the Middle East.

Army’s people should be proud of their work, training and working with partners in the region, delivering high-quality individual and collective training and on operations. All these actions make a difference and contribute to Defence Strategy and the security of Australia and Australians.

We have more work to do. The rapidly changing strategic environment means less time for preparation, more tasks and less certainty about the type and sizes of tasks.

Land forces will fight on land, and from the land, into other domains, and at all ranges. Extreme weather events and natural disasters are more likely to affect Australian communities and this means land forces will contribute to ADF support to state agency responses at greater scale and for longer durations. Equally, violence, fatigue, fear and chance endure as fundamentals of war and conflict. Our culture, character and resilience prepare us for these.

The Defence Strategic Update acknowledges these changes and challenges. The Force Structure Plan strengthens Army’s ability to prepare land power with greater potency and persistence in all domains. This includes enhanced littoral, air, ground manoeuvre, robotic and autonomous system, long-range fires, information warfare, and air and missile defence capabilities. These ensure Army can prepare teams that enable the Joint Force for a wider range of tasks in cooperation, competition and conflict.

Army is well postured to meet the challenges of the environment and deliver new capabilities. We have a strong and well-tested framework. Our environmental assessment Accelerated Warfare is forward looking. Our central idea in response, Army in Moti Motion, emphasises balance and transitions between the present and future in individuals, teams, concepts and equipment.

The foundation of Army in Motion is our people. Good Soldiering ensures that our people are ready now for Accelerated Warfare. People of strong character, good at forming teams and making ethical decisions. The Army Ethics Enhancement Plan, which I have been pleased to recently release, supports our teams to understand ethical decision-making in chaotic, uncertain and violent situations that typify conflict, but are applicable every day.

We value new ideas, fresh thinking and different perspectives because they make us better. Good Soldiering is the awareness, emotional intelligence and humility to bring these together and how we live the newly released Defence Values: Service, Courage, Respect, Integrity and Excellence.

Our people also ensure that we are ready for new capabilities. We need to upskill, expand our thinking, and be more agile and scalable. Army’s workforce and training system is the hub responding to this challenge. This is why a Future Ready Workforce and training transformation is my priority.

Our system must be simple, scalable, sustainable and enabled by Australia’s people, geography and Defence industry. Through the Army Operating System, we are balancing our transformation with meeting our mission. Our mission, to prepare land



power to enable the Joint Force, also aligns us with other group and service contributions and reinforces the imperative of thinking bigger than ourselves.

Our people are already enthusiastically driving an Army in Motion. Across our commands and units, you are innovating, finding better ways to deliver training and forming new teams to confront new challenges.

Army's Contribution to Defence Strategy, Edition Two describes all these ideas. It guides Army leaders and helps them to explain how Army contributes to Defence Strategy. Read Army's Contribution to Defence Strategy, Edition Two and discuss it at your level and in the context of your role. Share your insights through Army professional military education forums such as The Cove and the Land Power Forum. Connect with joint, industry and academic partners at every level and encourage new ideas and openness. Explain in your terms, to those you connect with, how Army contributes to Defence Strategy now and in the future. By increasing the understanding of land power we strengthen the Joint Force and Defence's response to a dynamic strategic context.

*We are an Army in Motion, Good Soldiering.*

## GOOD-BYE OLD FRIEND



The moving image of a soldier bidding farewell to his fatally injured horse is in the Board Room at Victoria Hospital, London. It was commissioned by the Blue Cross in 1916 to raise money to help horses on active service. The artist is Fortunino Matania and it is one of his most famous war-time illustrations.

Conditions were severe for horses at the front; they were killed by artillery fire, suffered from skin disorders, and were injured by poison gas. Hundreds of thousands of horses died, and many more were treated at veterinary hospitals and sent back to the front. The following two poems were inspired by the painting.

### A Soldiers Kiss

*by Henry Chappell*

Only a dying horse! pull off the gear,  
And slip the needless bit from frothing jaws,  
Drag it aside there, leaving the road way clear,  
The battery thunders on with scarce a pause.

Prone by the shell-swept highway there it lies  
With quivering limbs, as fast the life-tide fails,  
Dark films are closing o'er the faithful eyes  
That mutely plead for aid where none avails.

Onward the battery rolls, but one there speeds  
Heedlessly of comrades voice or bursting shell,  
Back to the wounded friend who lonely bleeds  
Beside the stony highway where he fell.

Only a dying horse! he swiftly kneels,  
Lifts the limp head and hears the shivering sigh  
Kisses his friend, while down his cheek there steals  
Sweet pity's tear, "Goodbye old man, Goodbye".

No honours wait him, medal, badge or star,  
Though scarce could war a kindlier deed unfold;  
He bears within his breast, more precious far  
Beyond the gift of kings, a heart of gold.

### Good-bye, Old Man

*Author Unknown*

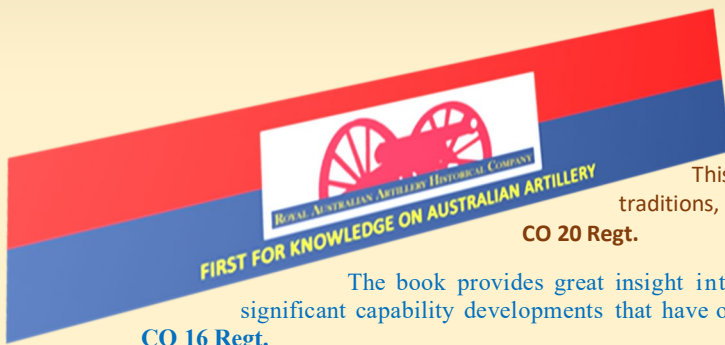
Good-bye, old man; we've fought our last together,  
You've struggled bravely, but you've got to die!  
Old man, it almost breaks my heart to leave you,  
Without one other word, except "Good-bye".

Good-bye, old man; we've kept up well together,  
And always shared whatever's come our way,  
We came to help old Britain fight the Germans,  
And up to now we've kept 'em well at bay.

Good-bye, old man; I know you're going to suffer,  
For there are great tears in your eyes,  
I wish you understood that 'tis for Britain  
That every hero fights, and bleeds, and dies!

Good-bye, old man; you won't be here much longer,  
You've got to go, old man, and go alone,  
We've always had our troubles both together,  
And life won't seem the same when you are gone!

Good-bye, old man; I wish that you could answer,  
And tell me all your brown eyes try to say.  
You know, old man, I've seen a lot of suffering,  
But never felt just like I feel to-day.



... the maintenance of our rich and long history would not be possible without the constant, unwavering support of the RAAHC and its members.

This book is testament to your devotion to capturing the traditions, history, and achievements of the Australian Artillery.

CO 20 Regt.

The book provides great insight into the history of Australian artillery, especially the significant capability developments that have occurred since the raising of the first battery in 1871.

CO 16 Regt.

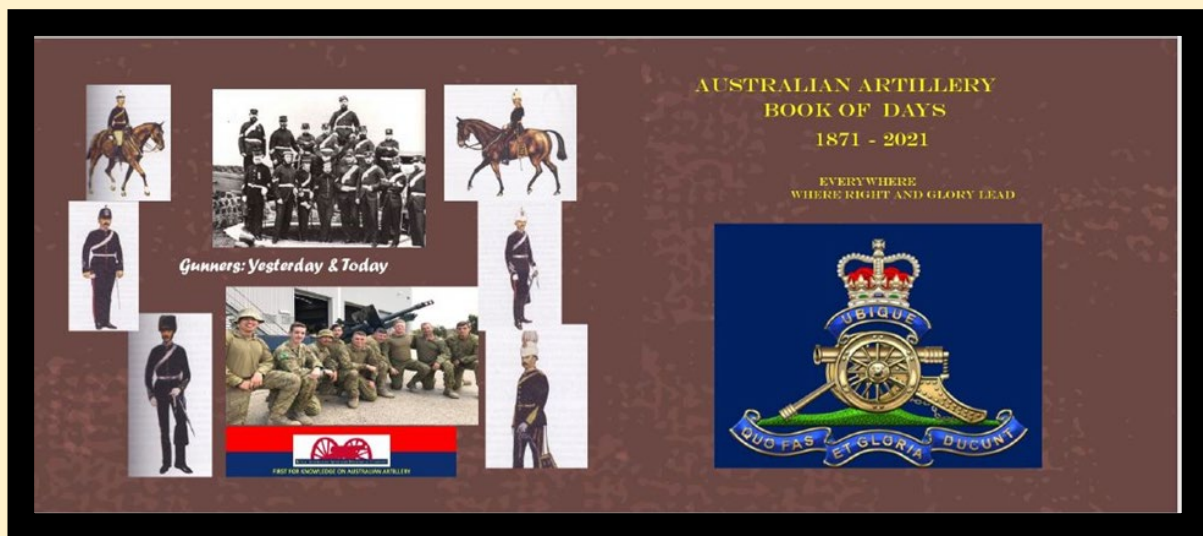
The Book of Days is a pictorial book tracing the history of Australian Artillery from 1871 to 2021

## Australian Artillery Book of Days

### 1871 - 2021

The Royal Australian Artillery Historical Company to mark this nationally historic anniversary of 150 years since the establishment of a permanent Australian artillery presence, has produced a photobook covering the period.

A complimentary copy has been gifted to all RAA units and sub-units.



The good news is you too can acquire your own part of Australian Gunner history as there are a limited number of editions still available for individuals to purchase.

The cost is a very reasonable \$55 which includes postage anywhere in Australia.

To order visit the RAAHC website at [http://artilleryhistory.org/ad\\_book\\_of\\_days.htm](http://artilleryhistory.org/ad_book_of_days.htm)

Payment can be made by EFT (please include surname) or PayPal/Credit Card

**Please Note:** At the moment only one copy per order to ensure equitable distribution of copies.





WG 002  
Revised Nov 2010

**KEY**

**Department of Defence  
EVENTS**

**150th Anniversary of Permanent Australian Artillery**



Version 1.0

Fire plan	150 <sup>th</sup> Anniversary of Permanent Australian Artillery	Supporting Regiment of Australian Artillery	Originator Representative Colonel Commandant	Modifications by Head of Regiment	Superimposed RAA Gunner Community & Associations	H-hour 01 August 2021	Sheet 1 of 1	Date/time group 11 0600K May 21
-----------	---	---	--	-----------------------------------	--	-----------------------	--------------	---------------------------------

Target information				Target information						
Line no	(a) Target no.	(b) Description	(c) Location	(d) Alt	(e) Remarks	(a) Target no.	(b) Description	(c) Location	(d) Alt	(e) Remarks
1	VZ 0001	Synchronised National Fire Plan - Phase One	National Saluting Stations, Uroque, Australia	01 Aug 21	From: 1200 h (AEST) To: 1700 h (AEST)	VO 0008 - 1, 20 Regts, SEQ Assocs & historical displays	Family Day, Picnic, Current & historical displays	Fort Lytton, Brisbane, QLD	01 Aug 21	Family Day DS to National Fire Plan. RFT by RAA Band
2	VZ 0002	Commemorative Ceremony - RAA National Memorial	Mount Pleasant, ACT	01 Aug 21	From: 1230 h (AEST)	VP 0009 - 4 Regt, HQ Assocs	Event to mark the 150 <sup>th</sup> & 61 <sup>st</sup> Anniversary of 4 Regt	Chau Pha Lines, Lavarack Barracks, Townsville, QLD	30 Apr - 04 May 21	RFT by RAA Band & 1 RAR Band
3	VZ 0003	Synchronised National Fire Plan - Phase Two	National Saluting Stations, Uroque, Australia	01 Aug 21	From: 1230 h (AEST) To: 1700 h (AEST)	VT 0010; 8/12 Regt	Concert incl 1812 Overture Regimental Ball	Robertson Barracks, Darwin, NT	10-11 Sep 21	RFT by 1 Bde Band
4	VZ 0004	Last Post Ceremony	Australian War Memorial Canberra, ACT	01 Aug 21	From: 1645 h (AEST)	VS 0011; 16 Regt, 9 Regt, SA Assocs	Open Day, incl 1812 Overture & Cocktail Party	Woodside Barracks, SA	18 Sep 21	RFT by SA Army Band
5	VZ 0005	Parade & Drum Head Service	Victoria Barracks, Sydney, NSW	06 Nov 21	From: 1000 h (AEDT) To: 1230 h (AEDT)	VZ 0012; Vic Assoc	Cocktail Party	Melbourne, VIC	06 Nov 21	
6	VZ 0006	All Ranks Cocktail Party	Victoria Barracks, Sydney, NSW	06 Nov 21	From: 1830 h (AEDT) To: 2230 h (AEDT)	VZ 0013; Vic Assoc	Saint Barbara's Day Dinner		04 Dec 21	
7	VZ 0007	Anzac Centennial Gun - RAAHC gifting to Army	Blaney Square, Russell Offices, ACT	03 Dec 21	From: 1600 h (AEDT) To: 1700 h (AEDT)	VZ 0014; NSW Assoc VZ 0015; TAS Assoc	Gunner Dinner Gunner Dinner	Paramatia RSL Club, NSW Anglesea Barracks, TAS	7 or 14 Aug 21 30 Oct 21	RFT by 7 and 23 Bty RFT by 6/13 Bty
						VZ 0016; AAA VZ 0017; SoArty	Nat Gunner W/E & Dinner 150 <sup>th</sup> Anniversary Dinner	Caloundra, QLD Bridges Barracks, Pucka, VIC	20-21 Aug 21 On Call	Happy Hour (to 150 <sup>th</sup> Anniv. Dinner) Date TBC SoArty

Schedule		(h)												(i)	(j)
Line no	Org or Fmn	(g) Firing unit (Call sign)	Pre-H	30 Apr - 04 May	H: 01 Aug	7/14 Aug	20/21 Aug	18 Sep	30 Sep	06 Oct	03 Nov	04 Dec	03 Dec	04 Dec	Remarks
1	RRAA	All Callsigns SoArty	Anzac Day 150 <sup>th</sup> Events	VZ 0001 VZ 0002 VZ 0003 VZ 0004 Note 1						VZ 0005 VZ 0006 Note 1			VZ 0007 Note 1		Note 1: For information on National Events, email RAA_HOR@defence.gov.au 9 Regt in DS - Sydney, Canberra, Melbourne, Hobart, Adelaide & Perth. General Note: For info on local unit or association commemorations and events in your region, contact the respective Unit ZIC or Association executive member Note 2: More info see AAA website www.australianartilleryassociation.com Note 3: More info see RAAHC website www.artilleryhistory.org
2	RAA Units & Artillery Associations	1, 20 Regts, SEQ Assocs 4 Regt, NQ Assocs	VP 0009 General Note												
3		8/12 Regt & Assoc 16, 9 Regts, PE & E SA Assocs													
4		TAS Assoc NSW Assoc Vic Assoc								VZ 0015					
5	Australian Artillery Association RAAHC														Superimposed Throughout - Essay & Photography Competitions - Supported by Merchandise Sales - See AAA & RAAHC Websites

Stock No 7530-86-093-8666



# Regimental

## New Commanding Officers

### LIEUTENANT COLONEL JAMES GROVES

#### 1st Regiment RAA



Lieutenant Colonel James Groves is the Commanding Officer of the 1st Regiment, Royal Australian Artillery. This Regiment supports Brisbane's 7th Combat Brigade by providing Joint Fires and Effects planning, coordination and engagement to enable formation manoeuvre.

Lieutenant Colonel Groves was raised in Sydney and educated at James Ruse Agricultural High School. He graduated from the Australian Defence Force Academy in 2003 with a Bachelor of Arts, majoring in History and Politics, and from the Royal Military College – Duntroon in 2004. He graduated from the Australian Command and Staff College (Joint) in 2017 with a Master of Defence and Strategic Studies. Continuous learning energises him.

As a junior officer, Lieutenant Colonel Groves fulfilled regimental, instructional and staff roles at 8th/12th Regiment, 4th Regiment, the School of Artillery and Headquarters 8th Brigade. In 2014, he returned to Townsville as the Battery Commander of 109th Battery, fulfilling Ready Battle Group and Emergency Response Force responsibilities. Following sub-unit command, he served as the Deputy Chief Instructor at the Royal Military College – Duntroon in 2016, as a Course Member at Australian Command and Staff College (Joint) in 2017, and as Military Assistant to the Deputy Chief of Army in 2018.

In late 2018 Lieutenant Colonel Groves was promoted to his current rank and joined the Chief of Army's Initiatives Group, a small team focussed on supporting the Chief in developing and communicating his strategic intent. Lieutenant Colonel Groves assumed command of 1st Regiment Royal Australian Artillery in December 2020.

Lieutenant Colonel Groves deployed to the Solomon Islands in 2006 as a platoon commander as part of Operation ANODE II, and to Afghanistan in 2009-10 as an artillery Forward Observer and Joint Terminal Attack Controller as part of Operation SLIPPER. He has contributed to multiple planning activities in Papua New Guinea, involving support and mentoring to the Papua New Guinea Defence Force at the joint operational level, and has delivered Joint Fires training and assessment at the New Zealand School of Artillery.

Lieutenant Colonel Groves is married to Kimberley, an occupational therapist, and they have three sons. He is a keen fan of cricket, cycling, and all codes of football and is a reluctantly retired rugby player. He is a student of history, an avid consumer of science fiction, and in mid-2021 will be a published author, contributing a chapter to Steven Leonard and Jonathan Klug's leadership book *To Boldly Go*.



## LIEUTENANT COLONEL TREVOR WATSON

### 8th/12th Regiment RAA



Lieutenant Colonel Watson entered the Royal Military College, Duntroon in 2003 and upon graduation in 2004 was posted to 'A' Field Battery, 4th Field Regiment. During his time at 'A' Field Battery, Lieutenant Colonel Watson fulfilled

numerous junior command positions including Section Commander, Gun Position Officer, and Forward Observer.

On promotion to Captain in 2008, Lieutenant Colonel Watson was posted to 1st Regiment as a Forward Observer in 105th Battery developing key technical skills in preparation for the Regimental Officer Gunnery Course. In 2010, Lieutenant Colonel Watson was posted to the Royal Military College – Duntroon and was employed as the Package Master Field Training - 3rd class, prior to being selected as Officer in Command of Gallipoli Company. During this posting Lieutenant Colonel Watson was selected to complete the United States Marine Corps – Expeditionary Warfare School Distance Education Program based in Quantico, United States of America.

In 2011, Lieutenant Colonel Watson was selected to attend the Royal School of Artillery Instructor in Gunnery Course in Larkhill, United Kingdom. This course provided Lieutenant Colonel Watson with additional instructional training and prepared him for employment at the School of Artillery upon return to Australia in 2012.

In 2012, Lieutenant Colonel Watson was employed as an Instructor in Gunnery within the Command cell of Joint Fires Wing at the School of Artillery. He was responsible for the conduct of the Regimental Officers Basic Course and the Regimental Officers Gunnery Course which he updated to account for the introduction of new equipment. He also used the targeting training provided by the Royal School of Artillery to develop a targeting and simulation package. In 2014, Lieutenant Colonel Watson promoted and was appointed as Battery Commander 105th Battery, 1st Regiment, Royal Australian

Artillery. In 2016 he completed Australian Command and Staff College before posting to the Directorate of Officer Career Management – Army in 2017. In this role he managed the careers of 280 Royal Australian Artillery officers and contributed to the development of the Personnel Fundamental Input to Capability.

Lieutenant Colonel Watson served as Staff Officer Grade one Current Operations at Headquarters Forces Command in 2019. He was responsible for the management and coordination of domestic and regional operations as well as the force generation for Forces Command formations and training centres. He introduced the Time with Teams management of Training Support Requests.

Operationally, Lieutenant Colonel Watson deployed on Operation Astute to Timor-Leste in 2006. He was employed as a Platoon commander as part of 'G' Company, Battle Group Faithful. This deployment, gave Lieutenant Colonel Watson valuable experience as a junior commander, including operating with other organisations such as the Australian Federal Police. In 2009 he deployed on Operation Herrick as the Australian Contingent Commander. This included pre-deployment training with 40th Regiment, Royal Artillery in Northern Ireland. Whilst deployed Lieutenant Colonel Watson was employed as the Joint Fires Cell Commander in Musa Qalah, Battery Commander and Forward Observer. Lieutenant Colonel Watson participated in both Combat Team and Battle Group operations contributing to the Joint Fires and Effects planning and execution. In 2020, he deployed as the Targeting and Plans Chief on Combined Joint Task Force – Operation Inherent Resolve and managed the lethal and non-lethal effects for the entire Combined Joint Operations Area.

Lieutenant Colonel Watson was appointed as Commanding Officer 8/12 Regiment, Royal Australian Artillery in January 2021.



## LIEUTENANT COLONEL MICHAEL SQUIRE

### 16th Regiment RAA



Lieutenant Colonel Michael Charles Squire is a serving officer in the Australian Regular Army. Michael was raised on his family's wheat and sheep farm in Mukinbudin, Western Australia. He attended public boarding school and spent several years

working as a farm labourer across the Wheatbelt. Michael graduated the Royal Military College – Duntroon, in December 2003.

Michael's junior military experience was predominantly in artillery command positions (air defence, counter fires and air land operations) and instructional postings (Duntroon and School of Artillery). He gained operational experience in Timor Leste and Iraq, and international engagement experience from Exercise Long Look (an attachment to the British Army in Germany) and Rifle Company Butterworth. Mike's most significant achievements as a junior officer included preparing short-notice forces and capability for operational deployment, refining the curriculum for Air Defence Officer's military education, and refining advanced Air Defence live-fire practices.

In 2016, Michael attended the Australian Command and Staff College (Joint), attaining a Distinction in a Masters of Military and Defence Studies from the Australian National University. He then proceeded on posting to the Pacific North West of the United States as an embedded exchange officer with America's First Corps (I Corps). Mike was extended in his position at I Corps, at the request of the Commanding General (LTG Gary J Volesky), to complete 32 months of service as one of the lead Future Operations planners for the Corps.

Michael gained several notable experiences during his time with I Corps: In 2017-18 he was a lead planner for the Corps in several significant multi-national Joint exercises. From September 2017 until August 2019, he was the lead-planner for the Multi-Domain Task Force Pilot Program (MDTF); this was a significant experience which

became a priority for the US Army. The Pilot Program informed the development of several Brigades of war-fighting capability and helped inform coalition strategy, philosophy and capability development. Michael's role with the MDTF and Multi-Domain Operations (MDO) philosophy saw him considerably engaged with coalition partners.

In August 2019, Michael and his family returned to Australia and he commenced work in the Australian Defence Force's Military Strategic Effects Branch. As Deputy Director Strategic Targeting, Michael was deeply involved in developing strategic targeting initiatives, competition concepts and refining Whole-of-Government coordination mechanisms. Michael was also the lead staff officer for Defence's Review of Operation BUSHFIRE ASSIST 2019-20; this work informed Defence's Lessons Learned process, informed numerous department-level changes, prepared Defence for the Royal Commission, and informed the review process for the COVID-19 Task Force. Michael was closely involved in the Defence Reform Strategy, developing a Defence Guide for strategic communications with government and key leaders.

On 11 December 2020, Michael commenced appointment as the Commanding Officer of 16 Regiment, Royal Australian Artillery, based at Woodside in South Australia. Mike is also appointed as the Senior Australian Defence Force Officer for Woodside Barracks.

Michael's wife, Lydia Teychenne, has significant experience in production across Australia's contemporary arts industry. Lydia is a Director for the Prince's Trust, with a particular focus on support to veterans, Defence families and transitioning members. Together, they have two boys: Eden (aged 7) and Willem (aged 2). They own a small wheat and sheep farm in Western Australia, enjoy travel and the arts, and aspire to build their own home one day. Michael enjoys cricket, Australian-rules football and hiking; however, most weekends are spent with family, working in the garden, or drawing.





## LIEUTENANT COLONEL SHAMUS ARMSTRONG

### 20th Regiment RAA



Lieutenant Colonel Armstrong grew up in South Australia and completed his schooling at Sacred Heart College in 2002. He was offered a position at the Royal Military College – Duntroon and graduated in July

2005, commissioning into the Royal Regiment of Australian Artillery. His first Regimental posting was to the 16th Air Defence Regiment. In his subsequent posting to the 1st Recruit Training Battalion he decided to change Artillery streams and was subsequently posted to the 4th Regiment, RAA. After fulfilling the role of Joint Fires Team Commander and Battery Captain he was posted to the Combat Training Centre – Live in 2013. During this posting he was an Observer Trainer and later the Assistant Operations Officer.

On promotion to Major in 2015 he was posted to the 1st Regiment, RAA. In his first year he was the Regiment's Operations Officer and commanded the 7th Brigade Joint Fires and Effect Coordination Cell on several major exercises, including Exercise Talisman Sabre 2015. In late 2015 he assumed command of the 105th Battery and was the Ready Battery for much of his appointment. Lieutenant Colonel Armstrong attended the Australian Command and Staff College in 2017, which he successfully completed by graduating with a distinction. In 2018 he commenced his posting as the Staff Officer Grade Two Joint Fires and Effects Coordination Cell at Headquarters 1st Division / Deployable Joint Force Headquarters.

During this posting he was fortunate to support numerous major multi-national exercises at the Divisional, Corps and Joint Task Force levels. He was also intimately involved with the Multi-Domain Live Fire that involved US Army, USMC and numerous ADF assets during Exercise Talisman Sabre 2019. For his efforts in planning and executing that live fire exercise he was awarded an ADF Silver Commendation. He gained a great deal of joint fires and effects, and

targeting experience in this role, which he then carried that on into his next posting. In 2020 he was promoted to Lieutenant Colonel and briefly posted to the Amphibious Task Group as the Chief of Plans. He was appointed as the Commanding Officer of the 20th Regiment, RAA and after qualifying on the RQ-7B on the Basic UAS Operators course he assumed command of the Regiment in December 2020.

Lieutenant Colonel Armstrong has been deployed on operations twice in his career. His first deployment was to Iraq in 2007 and his second to Afghanistan in 2011. On both deployments he fulfilled advisory and mentoring roles, from which he took a number of lessons away. His deployment with the Australian Army Training Team – Iraq emphasised the significance of strong relationship building with coalition partners as well as the Iraqi officers he was mentoring. Those skills were reinforced in Afghanistan in 2011 with the Artillery Training and Advisory Team – Kabul, where he commanded a coalition training team.

Lieutenant Colonel Armstrong has two postgraduate qualifications. He graduated from the University of New South Wales with a Master of Business in 2015 and a Master of Military and Defence Studies from the Australian National University in 2017. He is married to Rhiannon and they have two children, Elizabeth and Edward. In his spare time, Lieutenant Colonel Armstrong enjoys surfing, playing Australian Rules football and spending time with his family.



## LIEUTENANT COLONEL JON ABUNDO CSM

### Joint Proof and Experimental Unit



LTCOL Abundo was born in Manila, Philippines, on 05 April 1983. He attended ADFA in 2001, graduating with a Bachelor of Science (Geography). Upon completing RMC–D in 2004, he was commissioned into the Royal Australian

Artillery and posted to 4 Field Regiment. LTCOL Abundo has held typical regimental positions—his early career highlights include liaison duties with the Timorese Army on OP ASTUTE, leading a significant sub-unit transition from artillery howitzers to 81 mm mortars and coordinating local government, media and ceremonial preparations for a Freedom of Entry to the City of Launceston.

In 2012 LTCOL Abundo studied at CTMC, graduating with a Master of Capability Management and was presented the CTMC Academic Award for the student with the highest aggregate score. In 2013 LTCOL Abundo undertook further explosives technical training in the United Kingdom, studying Test and Evaluation at the Royal Military College Shrivenham and Munitions Design, Testing and Safety with the UK Ministry of Defence.

On promotion to MAJ in 2014 LTCOL Abundo was posted to the independent Joint sub-unit command position at the Proof & Experimental Establishment, Port Wakefield. Leadership challenges unique to the weapon test range included the sub-unit’s geographic isolation and managing the mixed military, civilian and contract staff. LTCOL Abundo’s key operational outcome was to program and execute Defence trials to inform strategic risks for Capability Managers and major project acquisitions. For meritorious devotion to duty as the Officer Commanding, LTCOL Abundo was awarded the Conspicuous Service Medal.

In 2016 LTCOL Abundo was posted to LAND 17 Phase 1C.2, which will deliver the next generation of 155 mm artillery ammunition. During the posting he acted in the position of Project Director, which required him to support

AHQ in Government’s approval of the \$156m project in Nov 17. To overcome the technical challenge of integrating non-US ammunition into the M777A2 gun and AFATDS battle-management system, LTCOL Abundo developed a five-year integration plan involving stakeholders across Defence, Industry and the US government. In addition, he conducted a preview trial as a risk reduction activity which saw the first firing of the new ammunition system in Australia showcasing the significant improvement in RAA capability. For his exemplary and dedicated performance in the project, LTCOL Abundo was awarded a Silver Commendation. In 2017 he completed his Master of Systems Engineering (Weapons & Ordnance) prior to commencing ACSC(J) 18.

After completing ACSC(J) with a Masters in Defence Studies, in 2019 LTCOL Abundo was promoted to his current rank and assumed the post of Staff Officer, Grade 1 in the Joint Fires – Army sub-program, where he was responsible for the development of key land fires projects. As part of the Force Structure Plan 2020, LTCOL Abundo was responsible for reprogramming the \$5.8b indirect fires IIP budget to create the Artillery Modernisation Plan. The AMP synchronised and orchestrated the scope, funding and schedule of notable projects such as LAND 8116 Protected Mobile Fires, LAND 8113 Long Range Fires, LAND 19-7B Short Range Ground Based Air Defence, and LAND 129-3 Unmanned Aerial Systems. The projects were placed on a reframing of the Artillery Capability Generation System, which comprised of the Army’s Strategic, Preparedness, People, Support and Enabling systems.

In 2021, LTCOL was appointed the Commanding Officer of the Joint Proof & Experimental Unit. He believes his regimental, technical, sub-unit command and project management experience makes him highly aware of the challenges that the unit faces, in an era faced with regional strategic uncertainty, post-COVID supply chain interruptions, and the near-certain trebling of T&E demand to support DSU outcomes.

# New Regimental Sergeant Majors

## WARRANT OFFICER CLASS ONE BRENDAN COLLES

### School of Artillery



Warrant Officer Brendan Colles was born on 18th December 1969 in Roma, Queensland. He enlisted into the Army on 9th July 1996 and was subsequently allocated as a gun number with the Royal Regiment of Australian Artillery.

On completion of initial employment training, Warrant Officer Colles was posted to the 4th Field Regiment. Warrant Officer Colles served as a gun number, artillery signaller and signals bombardier. During this time, he deployed to Timor Leste as a part of Operation TANAGER within the Civil Military Affairs team.

In 2003, Warrant Officer Colles conducted his first Training Command posting to the 1st Recruit Training Battalion, Wagga Wagga as a recruit instructor. He then returned to the 4th Field Regiment in 2004, where he was promoted to the rank of sergeant and assumed the role of Signals Sergeant, 107th Battery. In 2006, Warrant Officer Colles deployed to Iraq on Operation CATALYST as part of the Australian Army Training Team Iraq V, as a trainer.

In 2007, Warrant Officer Colles conducted his second Training Command tenure at the School of Armour Puckapunyal, as a communications instructor. In 2009, Warrant Officer Colles was subsequently posted back to 4th Regiment as the Regimental Signals Sergeant. Warrant Officer Colles was promoted to warrant officer class two in 2009 and assumed the role of Battery Guide 107th and 109th Battery. In 2011, Warrant Officer Colles deployed to Afghanistan as part of Operation SLIPPER as an artillery mentor.

In 2013, Warrant Officer Colles posted to the 8th/12th Regiment as the Operations Warrant Officer. In 2014, Warrant Officer Colles assumed the role of Battery Sergeant Major 101st Battery

with a subsequent position as Battery Sergeant Major 102nd (Coral) Battery in 2016. In 2016, Warrant Officer Colles deployed to Iraq on Operation OKRA as training team second in command. Warrant Officer Colles was promoted to warrant officer class one in 2017 and was appointed as Master Gunner 8th/12th Regiment 2017 – 2020. Warrant Officer Colles is currently appointed as the Regimental Sergeant Major, School of Artillery.

Warrant Officer Colles is married to Jacqueline and has two children, a daughter Toni and son Reece. Warrant Officer Colles' hobbies include fishing and camping with his family and friends. He enjoys sport and follows the National Rugby League and Super Rugby.

---

## WARRANT OFFICER CLASS ONE SHAUN JOLLEY

### 1st Regiment RAA



Warrant Officer Class One Shaun Jolley was born in Bundaberg, Queensland in January 1979, and enlisted into the Australian Army in February 1996, he was allocated to the Royal Regiment of Australian Artillery and has held a variety of

regimental appointments within 1st Regiment, RAA and 8th/12th Regiment, RAA.

In 2009, Warrant Officer Class One Jolley was posted to the 1st Recruit Training Battalion as a platoon sergeant and subsequently as the Assessment Sergeant. He was promoted to Warrant Officer Class Two in 2011 and posted as the Sergeant Major Instructor Gunnery to 13 Battery, which was renamed the 5th/11th Battery and allocated to the 25th/49th Battalion, The Royal Queensland Regiment in 2013.

In 2015, Warrant Officer Class One Jolley was posted on exchange to Close Support Wing at the Royal School of Artillery, Larkhill, United Kingdom (UK), instructing Royal Artillery and international students on Artillery reconnaissance and manoeuvre with the British Army. In 2017,



he was appointed Battery Sergeant Major of 103rd Battery, and subsequently held the appointment for Combat Services Support Battery and Operations Support Battery, 8th/12th Regiment, RAA.

Warrant Officer Class One Jolley has represented the Australian Army as part of Exercise LONG LOOK to the Royal School of Artillery, UK in 2003. He has also deployed on Rifle Company Butterworth as a section commander in 2005, and as the Company Sergeant Major in 2017.

Warrant Officer Class One Jolley has represented the Australian Army Rugby Union at the Australian Rugby Service Nationals and on tour in Singapore, China, Hong Kong, France and Germany; he has also represented the Australian Services Rugby Union in the Pacific Military Cup and at the Inaugural International Defence Rugby Championship in 2011.

Warrant Officer Class One Jolley has seen operational service in Bougainville with the Peace Monitoring Group on Operation BEL ISI in 1998/1999, East Timor with the 6th Battalion, Royal Australian Regiment, as part of the United Nations Transitional Authority East Timor on Operation TANAGER in 2000, Iraq with the Australian Army Training Team – Iraq on Operation CATALYST in 2006/2007, Afghanistan with the 3rd Battalion, Royal Australian Regiment Task Group on Operation SLIPPER in 2012, and Egypt with the Multinational Force and Observers on Operation MAZURKA in 2020/2021.

Warrant Officer Class One Jolley is married to Kathryn, and together they have four children, Ethan, Riley, Laney and Skyla. He enjoys playing and coaching Rugby Union and exploring the outdoors with his family.

### OFFICER, WO & SNCO FAREWELLS

If you have 20 or more years full-time and/or part-time service & have not been farewelled & still wish to be, please contact Major DT (Terry) Brennan for officers & WO1 DT (David) Nutini for WO & SNCOs. Alternatively, if you are aware of anyone who was over looked no matter how long ago and they still wish to be invited please pass on their contact details. It is never too late to attend the Regimental farewells.

## Senior Officer Appointments 2021

*Correct as at 17th February 2020*

### Full-time

- Lieutenant General Gregory Charles **BILTON** AO, CSC - Chief of Joint Operations
- Major General David Peter **COGHLAN**, AM - Head of Armoured Vehicle Division, CASG
- Brigadier Damian John **HILL**, AM - Director General Capability Interoperability Test and Evaluation, Australian Defence Force Headquarters
- Brigadier David John **KELLY**, DSM, CSC - Chief of Staff, Army Headquarters
- Brigadier Richard Anthony **VAGG**, DSC - Director General Air and Land Combat Analysis, AHQ & Head of Regiment
- Colonel Robin J **ALSWORTH**, Director J35 Global, Headquarters Joint Operational Command
- Colonel Nicholas K **BOLTON** – Director Strategic Governance, Army Headquarters
- Colonel John Angus **DOUGALL**- Director Business Intelligence, AHQ
- Colonel David Mark **EDWARDS** CSC – Director Joint Land Collective Training, FORCOMD
- Colonel Nicholas James **FOXALL**, AM - - Student, Centre for Defence Strategic Studies Course, ADC
- Colonel Bede Thomas **GALVIN**, CSC and Bar - Director of Military Arts, RMC Duntroon
- Colonel Michael Robert Carver **KENNEDY**, AM - Director Career Management Support - Army
- Colonel Stuart Nicholas **KENNY**, DSM, CSC - Director Joint Collective Training/ J73, HQ JOC
- Colonel Andrew R **LANGFORD** - Director Combat Support Program, AHQ
- Colonel Douglas W **MALLETT**, AM – Chief of Staff, Office of Head Information Warfare

- Colonel David **RYAN** – Director Land, AHQs
- Colonel Corey Jason **SHILLABEER**, CSC - Colonel Effects, Headquarters 1st Division
- Colonel Richard **WATSON** - Defence Attache Dili.
- Colonel Nicholas **WILSON** - Colonel - Future Capability HQ FORCOMD
- Colonel Charles Peter Howard **WELLER**, CSC and Bar - Syndicate Director, Defence & Strategic Studies Course, ADC
- Colonel Brandon Ashley **WOOD** - Senior Advisor Strategic Policy & Intelligence – Representative Staff Tel Aviv
- Colonel Paul **LANDFORD** CSC (Reserve List – DA26) – Inquiries Officer
- Colonel John Brendan **MACLEAN**, CSC (Reserve List) - Project Officer
- Colonel Andrew Alfred **PLANT**, CSM (Reserve List - DA26) - Director Training, Australian Army Cadets, AHQ
- Colonel Sean Thomas **RYAN** (Reserve List) – Research Assistant , ADC
- Colonel Stephen Michael **SADDINGTON** (Reserve List - DA26) -Joint Information Warfare, Joint Capabilities Group

### Active Reserve

- Brigadier Tim **O'BRIEN** - Assistant Commander - 2nd Division
- Colonel Warwick A **YOUNG**, OAM - Commander NSW AAC Brigade

### Reserve List &/or Serving on DA26

- Major General Michael Peter **CRANE**, AM, DSC (Reserve List) - Safe Base Review, Defence Security Authority
- Major General Craig Denis **FURINI**, AM, CSC (Reserve List – DA 26)
- Brigadier Wayne T **GOODMAN** (Reserve List - DA26) – Head - ADF Arts for Recovery Resilience Teamwork and Skills, Joint Health Command
- Brigadier Neil Thomas **SWEENEY**, AM (Reserve List - DA26) - Headquarters 2nd Division
- Brigadier Philip Douglas **WINTER**, AM, CSC (Reserve List - DA26) - Director General ADF Sports Cell, Joint Capabilities Group
- Colonel Michael Rodney **AHERN**, CSC (Reserve List – DA26) Senior Analyst Defence Test & Evaluation
- Colonel Scott E **CLINGAN** (Reserve List - DA26) - Strategic Events, Visits & Protocol, HQ JOC
- Colonel Stephen T **GOLTZ** (Reserve List - DA26) - JFECC Projects, Headquarters 1st Division
- Colonel Andrew Mark **HAEBICH**, CSC – (Reserve List)

## Senior Soldier Appointments 2021

### Tier C

Vacant

### Tier B:

- WO1 Tony **KENNEDY** – RSM CATC
- WO1 David **NUTINI** – RMG CATC
- WO1 David **MCGARRY** – JOSS NSW
- WO1 Anthony **HORTLE** – JOSS SA

### Tier A:

- WO1 Brendan **COLLES** – RSM SOARTY
- WO1 Luke **BURGESS** – MG SOARTY
- WO1 Chris **LEECHMAN** - MG NETT SOARTY
- WO1 Brett **DONALDSON** – RSM 8/12 Regt
- WO1 Chris **LEECHMAN** – MG 8/12 Regt
- WO1 Matthew **MILLAR** – RSM 4 Regt
- WO1 Daniel **STEWART** - MG 4 Regt
- WO1 Shaun **JOLLEY** – RSM 1 Regt
- WO1 Matthew **DAWSON** – MG 1 Regt
- WO1 Craig **WOODHALL** – RSM 9 Regt
- WO1 Nestor **CASAS** – MG 9 Regt (ARES)
- WO1 Reece **HAYS** – RSM 20 Regt
- WO1 Melvyn **WOOD** – SWO 20 Regt
- WO1 Gavino **MURA** – RSM 16 Regt
- WO1 Adam **LAW** – RSMIG 16 Regt
- WO1 David **RAYMENT** – WO&NCO Academy SEQ
- WO1 Jamie **CORNWALL** – RSM 3 HSB
- WO1 Paul **BOSWELL** – DSCMA

- WO1 Philip **GRIEVES** – HQ FORCOMD
- WO1 Stephen **SCHUMANN** – MG JFs, AHQ
- WO1 Nathan **COLE** – RSM CTC Live
- WO1 Scott **CASWELL** – MG P&EE Pt Wakefield
- WO1 Anthony **CHARLES** – MG IFS CASG
- WO1 Jason **JARVIS** –RSM 5 Avn Regt
- WO1 Simon **THOMPSON** - Wagga
- WO1 David **GRUNDELL** – SOARTY / CATC
- WO1 Richard **ANDERSON** – CATC

## ROYAL MILITARY COLLEGE, DUNTROON

### December 2020 Graduates

#### LIEUTENANT'S

- **BEGLEY**, Fletcher Jack – 1 Regt
- **BHATT**, Harry – 16 Regt
- **BORGES**, Sean Patrick Alfred – 8/12 Regt \*

\* Brigadier WJ Urquhart Trophy Recipient

- **CUBELIC**, Luka Marko – 8/12 Regt
- **CURRAN**, Lachlan Paul – 4 Regt
- **DENNIS**, Matthew John - 16
- **DRUMMOND**, Jackson Darcy Isaac – 1 Regt
- **KINDL**, Nicholas Patrick – 1 Regt
- **KLOPROGGE**, Rachael Emily – 20 Regt
- **KREUZBERGER**, Jack Thomas – 8/12 Regt
- **LE**, Andy Anh – 20 Regt
- **LEE**, Yea Jung – ADFA (Hons)
- **PARVIAINEN**, James Phillip – 16 Regt
- **PERKINS**, Daniel James - SOARTY
- **ROBERTS**, Jacob Alan - SOARTY
- **ROBERTSON**, Andrew James – 1 Regt
- **SENSYNS**, Byron Petar – 20 Regt
- **TAYLOR**, Christopher James Frank – 20 Regt
- **TENNI**, Sam Vaher – 1 Regt
- **THORPE**, Lucas Syl – ADFA (Hons)

- **WALKER**, Liam Alexander – 16 Regt
- **WILLIAMS**, Hannah-Georgia – 8/12 Regt

## Honours & Awards

### AUSTRALIA DAY 2021

#### MEDAL (OAM) OF THE ORDER OF AUSTRALIA MILITARY DIVISION

##### Warrant Officer Class One John Robert **FRANKLIN**



FOR MERITORIOUS SERVICE AS THE BAND SERGEANT MAJOR OF THE BAND OF THE 1ST REGIMENT, ROYAL AUSTRALIAN ARTILLERY.

Warrant Officer Franklin executed his appointment as the Band Sergeant Major to an exemplary standard for two decades. Resulting from his service, the Band of the 1st Regiment, Royal Australian Artillery flourished, becoming a cohesive and highly effective organisation that provides quality musical support to the Australian Defence Force and a valued method by which the Australian Army achieves community, Indigenous and international engagement objectives, domestically and regionally.

#### DISTINGUISHED SERVICE MEDAL (DSM)

##### Brigadier David John **KELLY** CSC



FOR DISTINGUISHED LEADERSHIP IN WARLIKE OPERATIONS AS THE CHIEF OF OPERATIONS FOR THE NORTH ATLANTIC TREATY ORGANISATION OPERATION RESOLUTE SUPPORT, AFGHANISTAN FROM DECEMBER 2018 TO DECEMBER 2019.

Brigadier Kelly demonstrated distinguished and determined leadership, in a senior operational appointment, while deployed to Afghanistan. His lead role in synchronising all Coalition Force operations underpinned.

## HEAD OF REGIMENT COMMENDATIONS

Medallion	Recipient	Comment
001	MAJ DJ Kelly OAM	
002	LTCOL NH Floyd	
003	Not awarded	Damaged
004	SGT JP Goss	Now WO2
005 - 010	JNCOs of the Year 2018 nominees	
011 - 016	GNRs of the Year 2018 nominees	
017	GNR JI Lewis	
018	BDR BR Byrne	JNCO of the Year 2019 nominees
019	BDR DT Campbell	
020	BDR AJ Orellana	
021	BDR IR Watson	
022	BDR ML Plant	
023	BDR MJ Hamer	
024	GNR BP Alder	GNR of the Year 2019 nominees
025	GNR FB De Nardi	
026	GNR DE Smith	
027	GNR RD Boyar	
028	GNR Z Farrugia	
029	GNR HA Whatley	
030	GNR AW Yang	9 Regt RAA
031	WO1 ME Wood	20 Regt RAA
032	BDR BP Beach	
033	Dr A Lopez	
034	WO2 DR Rogers	20 Regt RAA
035	LCPL RD Gillum	
036	CPL DJ Ingram	
037	CPL JS Caswell	

## AUSTRALIA DAY MEDALLIONS – 2021

Each year the National Australia Day Council invites the Department of Defence to participate in celebrating Australia Day by awarding Australia Day Medallions to our personnel.

- Sergeant (now Warrant Officer Class Two) Slee – 20th Regiment RAA

## SOLDIERS MEDALLION 2020

*For exemplary service.*

- Corporal Luke McKinnon – 1st Regiment RAA
- Gunner Michael Turnbull – 1st Regiment RAA
- Gunner JK Malone – 4th Regiment RAA
- Private MM Gallaher – 4th Regiment RAA
- Bombardier Khann – 8th/12th Regiment RAA
- Private Deland – 8th/12th Regiment RAA
- Corporal J Eldridge – Combat Services Support Battery, 16th Regiment RAA
- Private B Roccamante – 110th Battery, 16th Regiment RAA
- Lance Bombardier Robert Fuller -20th Regiment RAA
- Lance Bombardier Zak Farrugia - 20th Regiment RAA

## COMMENDATIONS

### Australian Defence Force

- Silver – Warrant Officer Class Two Matthew Dawson – 1st Regiment RAA
- Silver – Warrant Officer Class Two Thomas Grieve - 1st Regiment RAA
- Silver - Bombardier Thomas Stewart - 1st Regiment RAA
- Silver - Captain J Bouzanquet – RHQ (Chaplain) – 16th Regiment RAA
- Silver - Lieutenant S Reid – Combat Services Support Battery, 16th Regiment RAA
- Silver - Sergeant S Bradley – Combat Services Support Battery, 16th Regiment RAA



- Bronze - Bombardier Jack Jennings – 1st Regiment RAA
- Bronze - Bombardier Scott McDowell – 1st Regiment RAA
- Bronze - Captain SE Brown – 4th Regiment RAA
- Bronze - Gunner L Harper – 110th Battery, 16th Regiment RAA
- Bronze – Corporal Joshua Zigas – 20th Regiment RAA

### Army

- Silver - Bombardier L Somerville – 4th Regiment RAA
- Silver - Sergeant Berry - 8th/12th Regiment RAA
- Silver - Sergeant Harley - 8th/12th Regiment RAA
- Silver – Lance Bombardier Lauren Kries (FORCOMD and 6 BDE JNCO of the Year) – 20th Regiment RAA



- Bronze - Gunner Hughes (finalist in CA soldier of the year) – School of Artillery
- Bronze – Bombardier Amy Henderson – 20th Regiment RAA
- Bronze – Warrant Officer Class Two Janine Davison – 20th Regiment RAA

### Group Commendation

- Level 3 – 4th Regiment RAA – Queensland Flood Assist Response Force
- Chief Joint Capability - Unit Gold Commendation L17PH2C - JPEU

### Forces Commander

- Silver – Corporal M Blades – CSS Bty 16th Regiment RAA

## SOLDIER OF THE YEAR

- 6th Brigade - Gunner M Woollatt (now Lance Bombardier)
- 

## EWEN & MATTNER AWARDS

### EWEN AWARD FOR RAA JNCO OF THE YEAR 2020

### BOMBARDIER SEBASTIAN LINDE



BDR Linde enlisted into the Australian Army in November 2012. After his Initial Employment Training as a Rifleman, BDR

Linde was posted to 8/9 RAR. In 2015, BDR Linde deployed as a ‘Guardian Angel’ on OP HIGHROAD in support of Force Protection Element 4.

In 2017, BDR Linde Corps-transferred as a Forward Observer to the RAA where he was subsequently allocated to 106 Bty, 4 Regt RAA. During his time with 106 Bty, BDR Linde deployed on OP AUGURY in 2019 as an instructor within the Urban Call For Fire Training Team, where he was responsible for the development and delivery of fire support training packages. In the same year, BDR Linde also deployed on OP NORTH QUEENSLAND FLOOD ASSIST.

In 2020, BDR Linde received promotion to his current rank and assumed the role of a Joint Fires Observer within 109 Bty. During the COVID lockdown, BDR Linde conscientiously prepared training materials and remediated training shortfalls for all the Bty’s Joint Fires Teams. Due to staffing shortfalls, BDR Linde was also required to fulfil the role of Joint Fires Team Commander throughout the Combat Team ATL5

certification activity - Exercise BROLGA RUN 20. His Combat Team Commander noted that BDR Linde was the highest performing JNCO within the Combat Team. Subsequently, he performed many other duties normally expected of the Battery Commander's Assistant as he assisted in the planning and execution of the Ready Combat Team's ATL5A activity – Exercise LONG KHANH. Despite being a junior BDR filling a senior position, BDR Linde's performance was noted as exceptional by both his supported unit's CO and his own CO. Subsequently, BDR Linde deployed as a section commander on OP COVID-19 ASSIST and again demonstrated his exceptional adaptabilities.

BDR Linde has consistently displayed excellence within his capacity as a Joint Fires Observer through his devotion to technical mastery and an extremely high level of professionalism that is worthy of acknowledgement. Within his primary Forward Observer role, BDR Linde's relentless pursuit of excellence and passion for team success establishes him as an excellent role model for his peers and subordinates alike. To possess the capacity to fulfil the role of Joint Fires Team Commander and execute these duties to an outstanding standard despite being relatively inexperienced is a testament to BDR Linde's aptitude and professional mastery.

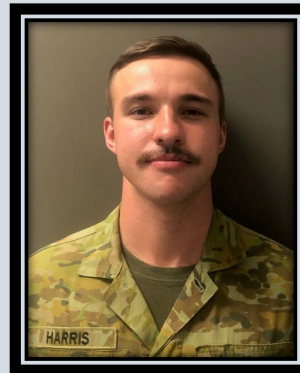
Throughout his time in 4 Regt RAA, BDR Linde has displayed superior potential and a level of professionalism that his peers and subordinates can aspire to replicate. BDR Linde is a role model as a JNCO and his performance is of the highest order and in keeping with the finest traditions of the Royal Regiment of Australian Artillery and the Australian Army.

---



## **MATTER AWARD FOR RAA GNER OF THE YEAR 2020**

### **GUNNER AYEVAN HARRIS**



During 2020, GNR Ayevan Harris has been an influential and key member of the Joint Fires Team - G12. Throughout the year, he has maintained a professional and mature approach to all

duties required of him and has regularly been the first member of his cell to volunteer as a nominee for courses and field exercises. He participated in Ex SHOT START and Ex BROLGA RUN as the senior signaler; singlehandedly provided support to WNCO courses by maintaining a CP and controlling a communications plan, and represented the Regiment on a number of high-profile activities.

Throughout the year, GNR Harris willingly and confidently stepped up into a 2IC role, normally fulfilled by a qualified LBDR. This was particularly evident during Ex BROLGA RUN when the Bty's JNCOs were either required on other tasks or were ill prior to field. GNR Harris took it upon himself to organise the issue of all equipment, communications gear and weapon systems, including the transfer of these items to the 2 CAV armoury. He acted independently and was able to communicate respectfully with senior members from another unit. When working within the wider Brigade, he confidently upheld a positive and professional reputation for the Regiment.

GNR Harris further displayed his ability to effectively network with external units through the coordination of communications training with 2 CAV personnel. From the connections he formed during Ex BROLGA RUN, GNR Harris was able to organise joint training for the Harris 150 HF radio between members of both units.

During his general duties, GNR Harris is a positive member with a 'can do' attitude who

takes every opportunity to gain more skills and confirm his trade knowledge. He has consistently gone out of his way to help others within his cell; for example helping others with remedial training for BFA shortfalls and ensuring that members have a safe means of getting home after formal functions. In addition, he has taken the initiative and developed communication sheets which all members can utilise in the field environment for the use of HF and Satcom systems.

GNR Harris has shown promising signs of leadership through his strong performance this year, both in barracks and field environments. Whilst he has not yet completed a JNCO subject course, he has taken opportunities to develop his skills in preparation for promotion, and to that end shows great potential for the future. His performance is of the highest order and in keeping with the finest traditions of the Royal Regiment of Australian Artillery and the Australian Army.

---

## **CITIZEN GUNNER OF THE YEAR BOMBARDIER DAN STOIAN**



For outstanding service as a Mortar Detachment Commander and Small Unmanned Aerial System Bombardier in 23rd Battery, 9th Regiment Royal Regiment of Australian Artillery.

Bombardier Stoian joined 23rd Battery from 2nd/10th Battery as a senior soldier and commenced his time with the Battery as an acting Command Post Bombardier. At the beginning of 2020, he deployed on OP BUSHFIRE ASSIST as an Unmanned Aerial System Team Leader, supporting operations around Cooma by conducting searches for Koalas that had survived the fire and needed rehoming.

Bombardier Stoian has matured well into his rank during 2020 and has taken on significant duties

above that of his worn rank. During the COVID-affected portion of the year, he was instrumental in developing COVID-Safe Army Combative Programme courses for 23rd Battery as both Course Manager and Instructor. This allowed the Battery to qualify the majority of its members at Level 1 and Level 2. Furthermore, Bombardier Stoian used this expertise to assist 7th Battery and 8th Signals Regiment to conduct their own COVID-Safe Army Combative Programmes, representing not only his Battery but also the Regiment and the RAA to a high standard.

Bombardier Stoian is well regarded and known to be one of the most responsive and diligent JNCOs, ensuring timely passage of information both up and down the chain of command. He has displayed a very conscientious attitude and he not only takes the initiative, but also actively anticipates the consequences and effects of his decisions and actions. This attitude makes him a forward leaning JNCO and a positive role model for his soldiers.

Bombardier Stoian has an excellent work ethic and is willing to dedicate his personal time to achieving the required tasks and ensuring the delivery of professional training to his Battery. He maintains a solid work/life balance, enabling him to continue to support 23rd Battery and at the same time succeed in his full-time civilian career. Bombardier Stoian has demonstrated commitment to his training which is evident in the days paraded and his training and operational accomplishments. He is a dedicated and capable JNCO who has sought additional responsibilities and challenges during 2020, and has delivered considerable capability to 23rd Battery, 9th Regiment and 2nd Division through his professional instructional manner.

Bombardier Stoian is an excellent role model as a JNCO, displaying great potential while delivering capability in a challenging environment. His performance is of the highest order and in keeping with the finest traditions of the Royal Regiment of Australian Artillery and the Australian Army.





## Head of Regiment St Barbara's Day Message 2020

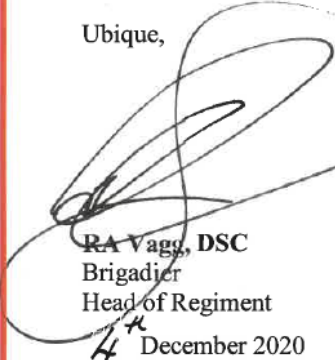
I extend my greetings and best wishes on behalf of the Representative Colonel Commandant, Brigadier S Roach AM (Retired), and the Colonels Commandant for Saint Barbara's Day on 4th December 2020.

Unfortunately, in the current climate, many activities to mark this important day will have to be scaled down or perhaps even cancelled. However, I still encourage you to take the opportunity to reflect on what we have achieved in 2020 and prepare for new challenges in 2021 – in particular our 150th Anniversary commemorations. 2020 has once again not only been extremely busy, but also unique in the challenges it has presented to us all as a result of the COVID-19 pandemic. You have risen to these challenges due to an enduring Regimental culture that is based on a strong welcoming identity that binds past, present and future Gunner generations with an ethos that strives for excellence.

I congratulate all who will be taking up new appointments in January next year as Commanding Officers, Battery Commanders and Regimental and Battery Sergeant Majors. It is also a day when many are promoted to the next rank and recognised for their continued potential. To you, I pass on my congratulations for your ongoing commitment to the Royal Regiment and the Army.

Finally, I congratulate and thank all ranks of the Royal Regiment of Australian Artillery, serving and retired, for their continued service and wish all Gunners serving overseas good shooting and a safe return to their families.

Ubique,

  
RA Vagg, DSC  
Brigadier  
Head of Regiment  
4<sup>th</sup> December 2020



*The Colonel Commandant and All Ranks of  
The Royal Regiment of Canadian Artillery extend  
Greetings to the Representative Colonel Commandant and  
All Ranks of the Royal Regiment of Australian Artillery,  
on Saint Barbara's Day, the fourth day of December,  
Two Thousand and Twenty.*

*Le colonel commandant et tous les membres du  
Régiment royal de l'Artillerie canadienne saluent  
le Colonel commandant représentant et tous les membres du  
Régiment royal de l'Artillerie australienne,  
en ce quatrième jour de décembre deux mille vingt à  
l'occasion de la fête de la Sainte Barbe.*



## A YULETIDE MESSAGE FROM THE MASTER GUNNER ST JAMES'S PARK

**LIEUTENANT GENERAL SIR ANDREW GREGORY KBE CB DL**

2020 will go down in history as a most unusual year. The Covid-19 pandemic has caused many people, including members of our United Kingdom and Commonwealth Artillery Regimental communities, personal sadness, distress and difficulties; the consequences will affect people for a considerable time.

And across the wider Regiment, a number of planned events and gatherings have been either adjusted or cancelled; these have included commemorating and celebrating the actions of our forebears through the 75th Anniversaries of VE-Day and then VJ-Day; commemorating the Battle of El Alamein, the full ceremonies of our respective Remembrance Parades and other, solely national events.

Despite these challenges, we should all be extremely proud of the manner in which our Royal Regiments have responded. In the United Kingdom, our serving regiments, alongside normal training and meeting readiness requirements, have risen to the challenge of supporting our National Health Service as part of the on-going national campaign to suppress this virus, often at personal risk to themselves and to the detriment of their family life. I have received reports that personnel from the Commonwealth Artilleries are similarly engaged. It is, to all intents and purposes, an operational campaign; all ranks have, yet again, done themselves and our Regiments proud.

We are going to have to live with continuing restrictions. While there have been definite benefits – for example we have been forced to adopt technology to enable more remote working, there are downsides, most notably the loss of personal contact that is such a critical element of comradeship and collective welfare. Hence, it is even more important to remember that we are ‘One Regiment’; United Kingdom and Commonwealth, Regular and Reserve, serving and retired, military personnel and families. We need to be strong together, not least by using all forms of Gunner media; I offer our own RA Association and RA Charity website (<http://www.thegunners.org.uk>) as examples. Please encourage all Gunners and Gunner families, young or old, to get in touch with comrades, to reminisce or just to contribute some cheerful banter. The timeless adage:

‘Once a Gunner, Always a Gunner’.

holds true today as much as ever. I wish you and your families a very Happy Christmas and New Year, even with the ongoing restrictions, and to a better 2021, a year in which I very much hope to be able to join the Royal Canadian Artillery and Royal Australian Artillery for milestone events in August and November.



## Order of the Day Royal Regiment of Australian Artillery Anniversary Greetings 2020

This year marks the 149th Anniversary of the formation of a permanent component of the Australian Artillery when the New South Wales Artillery was formed. A part of this Regiment was later designated A Battery and continues in service on the RAA Order of Battle to this day. This is also the date that, by convention, we celebrate not only the beginning of the Australian Gunner journey, but also its continued service as the Royal Regiment of Australian Artillery to the Army, our Nation and the Commonwealth.

As is customary on the 1st of August each year, our Representative Colonel Commandant has written to Her Majesty The Queen, our Captain General, on behalf of the Colonels Commandant, the Head of Regiment, and all Ranks of the Royal Regiment of Australian Artillery to convey to Her Majesty our respect and loyalty on the marking of another milestone in our history. Congratulations were also extended to Her Majesty on the occasion of her ninety fourth Birthday and our appreciation was expressed for the enduring leadership and dedication shown by Her Majesty to the service of the people of the Commonwealth.

On behalf of the Representative Colonel Commandant, Brigadier S Roach AM (Retired), and our Colonels Commandant, I sincerely thank all ranks of the Royal Regiment, both serving and retired, for their outstanding service. Let us also remember at this time the members of the Regiment who have passed away during the last year and please join me in appreciating and honouring their service. They will be sadly missed.

Finally, our thoughts are with those members of the Regiment who still remain deployed on operations around the world. We wish them all good shooting and a safe return to their families.

Ubique,

A large, stylized handwritten signature in black ink, appearing to read 'RA Vagg'.

RA Vagg, DSC  
Brigadier  
Head of Regiment

1 August 2020

Gunners: Accurate, Responsive, Dependable, Joint



# 2021: 150<sup>th</sup> Anniversary of the Establishment of a Permanent Australian Artillery Presence

## Calendar of Events: Kindred Associations and Organisations

### PHOTOGRAPHIC, VIDEO AND ESSAY COMPETITIONS

The Australian Artillery Association (AAA) and the Royal Australian Artillery Historical Company (RAAHC) will jointly conduct three contests during the 150th Anniversary. The competition areas are:

- photographic
- video
- essay

The contests will be open to all gunners, serving and retired. Funding will be provided equally by both organisations. Entry will mean the contributor agrees that their entry may be published by AAA / RAAHC and be made available to wider RAA.

### Photographic Competition

There will be five rounds with one in March, May, July, September and November respectively. Subject matter must be artillery related (equipment, exercises, mess life, people, etc). \$100 cash will be the prize for each round.

Entries to be judged by Mr Greg Behan, a retired gunner and semi-professional photographer.

### Video Competition

Again there will be five rounds with one in March, May, July, September and November respectively. Subject matter must be artillery related (equipment, exercises, mess life, people, etc). \$100 cash will be the prize for each round.

Entries to be judged by Graham Hampton, Kim McGrath, Ian Ahearn, and Greg Behan.

### Essay Competition

The essay topic is “Time to Reflect”. Subjects can be wide ranging including aspects of service, friendships, equipment’s used, operational experiences, good and bad times, leadership, home support, etc. Retired gunners may want to write about their post service activities.

Essays will be judged by Ian Ahearn, Kim McGrath, Graham Hampton and Craig Furini. Prizes will be \$750 for first prize, \$500 for second prize and \$250 for third prize.

Essays are to be submitted by close of business on 31 October 2021. Prizes will be announced on St Barbara’s Day 4 December 2021.

## Competition Details

Competition details will be displayed on the AAA/RAAHC websites. The development site is at:

<https://www.australianartilleryassociation.com/2021/index.htm>

Contest results will be published on AAA / RAAHC websites and Facebook sites as will submitted materials. They will also be made available to RAA for use in electronic and printed publications.

## AUSTRALIAN ARTILLERY ASSOCIATION INC

Activities and initiatives by the Australian Artillery Association throughout 2021 include but are not limited to those here.

### 150th Anniversary Car Sticker.

These Car Stickers were recently released on both our Website and Facebook page and will continue to be available for sale until the end of 2021. Such has been the immediate and continued success coupled with a significant amount of positive feedback of the 150th Car Stickers we will make available in the first quarter of 2021 a limited edition medallion of the same size and dimensions presented in a jewellers case. We are looking towards having produced a total of 200 with only 150 being made available for sale with each of the Batteries and Regiments being gifted one along with our Patrons and Sponsors.

### Sweetheart Brooch

Sweetheart Brooch is gold in colour encrusted with rubies. This is a revamp on the old Sweetheart Brooch that was available throughout WWI, WWII and last seen in the early 1980's. That previous version was silver in design and encrusted with marcasite diamonds. The new brooch has more clarity of design and will be in a burgundy jewellers case embossed with "UBIQUE" in gold lettering. With a lot of activities anticipated nationwide throughout 2021 with a significant number of personnel attending accompanied by their wife/partner we thought it would be an ideal opportunity to introduce the brooch to enable those wives / partners to also display their support for the Regiment.



### Commemorative Medallion.

On the 7th May 2020, Her Majesty Queen Elizabeth II our Captain General approved the design. The medallion will be 6 cm in diameter and come as a 2 piece set contained within a royal blue jewellers case. One of the two medallions will be numbered. All numbers relevant to existing regiments



and batteries will be withheld from sale for presentation to the respective name sakes during 2021. Number One will be gifted to Her Majesty Queen Elizabeth II our Captain General.



## National Gunner Dinner

The Australian Artillery Association will hold a 2021 National Gunner Dinner to celebrate the 150th Anniversary at The Event Centre in Caloundra over the period Friday 20th August (Happy Hour) and Saturday 21st August 2021 (Dinner). Full details of the dinner along with Online Registration can be viewed by visiting their website: <https://www.australianartilleryassociation.com>.

With the COVID-19 vaccine now being distributed and the borders open the dinner will be the ideal time to come together on mass to celebrate our heritage, rekindle friendships and enjoy yourself amongst friends within the greater Gunner community. “



### Media Shout Outs.

Throughout 2021 we will be sending into Radio Stations, Television Stations that present sports shows requesting a “Shout Out” ... “to all the current and ex serving members of the Royal Regiment of Australian Artillery who are celebrating the 150th Anniversary of Artillery in Australia this year .

### RAA ASSOCIATION (VIC).

The RAA Association of Victoria’s plan is to support and augment the national program of events with several smaller events throughout the entire year, thus providing options for community engagement about the traditions and rich history of The Royal Regiment in Australia.

## 150 Gun Salute, 1 August 2021

### Melbourne Shrine of Remembrance

The Association is working with BC 2/10 Light Battery to create a combined artillery footprint at the Melbourne Shrine of Remembrance when the Battery supports the 150-gun salute. The Association has organised the following at the Shrine to promote how artillery has shaped our history:

- At the Melbourne Shrine there will be a display including:
- Regimental Standard flown from the flag pole;
- Recently restored Armstrong 12LB (no 370) along with the Werribee Half Battery personnel in period uniforms,
- Restored 25 pounder, and
- 2/10 Lt Bty current equipment.

### At Point Nepean

The importance of Point Nepean as the first shot in WW1 is too great for this site and its history to be ignored. There will be a display including a Salute Gun from 2/10 Battery and a 25 pounder.

### At Fort Queenscliff

There may be an event as the Army Museum has black powder guns that can be fired in recognition of the importance coastal artillery played in our history.

### Gunner Symposiums

These will be convened throughout the year. The purpose is to bring current, and retired gunners together in a less formal format to have a light supper, refreshments and discuss the profession of Artillery.

The theme is “how we got to where we are”. This will be a continuation from the very successful Fire Power Series conducted by the RAAHC mark the Artillery contribution in the Great War.

Throughout the year Capability and CASG representatives will be invited to deliver short briefs on Artillery related Projects.

### Pod Casts

To compliment the Gunner Symposiums, Major Eling will create a series of podcasts about the 10 Australian Artillery battles. Some of these



podcasts will be presented at the Gunner Symposiums.

### **Official Unveiling of the 12 pounder No 370 Armstrong Gun**

Details to be advised / advertised.

### **Victorian Cocktail Event**

The RAA Assoc of Vic will hold a Victorian Cocktail event around the same time as the Sydney event noting that many of our members may not be able to attend the National Event. We would like to get our gunner community involved and aligned to the national program but make it accessibility at our local level.

### **Regimental Dinner / St Barbara's Day**

To round out the year we will hold a Regimental Dinner the night before St Barbara's Day. This is a great tradition in Victoria where the Regimental Dinner is followed by St Barbara's Day on which the RAA Assoc of Victoria conduct our AGM.

POC: Jason Cooke, President, Royal Australian Artillery Association of Victoria M: 0409 043 165

### **LOCATING SURVEILLANCE & TARGETING ORGANISATION ASSOCIATION.**

There will be a deferred 2020 reunion planned to coincide with ANZAC Day (Brisbane) 2021 COVID 19 restrictions, border closures etc permitting.

### **4TH FIELD REGIMENT (SVN) ASSOCIATION.**

Two separate reunions / lunches are planned for ANZAC Day 2021. One in Brisbane and the other in Sydney. The events will mark the Return To Australia of 4th Field Regiment (second tour) in March 1971.



# **PODCASTS: 150 YEARS OF AUSTRALIAN ARTILLERY**

*Major James Eling*

August the 1st, 2021 represents the 150th Anniversary of the founding of the first Permanent Artillery unit in Australia, when the NSW Colonial Secretary's Office proclaimed the raising of a Permanent Military Force which included one battery of Artillery, the 'New South Wales Artillery'. Over the 150 years, Australian Artillery has participated in countless engagements in support of our troops, our Allies troops, as lone sections or batteries, as a part of combined arms engagements and joint operations.

As a part of the 150th Anniversary of Australian Artillery, I am looking to identify the 10 most important Artillery engagements that the ADF and it's precursors have been involved with and produce a podcast series around those decisive engagements to educate Army about the contribution of Australian Artillery to our Nation's proud history. I also intend to educate listeners about the role of Artillery and to commemorate the sacrifice of Australian's gunners.

Decisive engagements will be decided upon based on the following criteria.

- Lessons from the principles of the employment of Artillery – Cooperation, Concentration of Fire, Economy of Effort and Sustainment.
- Lessons from a range of conflicts, pre Federation, WW1, WW2, Korea, Vietnam, and Afghanistan.
- Lessons from important engagements where Artillery played a decisive role.
- Lessons to highlight the different artillery tasks – suppression, neutralisation, destruction, harassment, illumination, interdiction, CBF and coordination of fires.
- Lessons from different components of Artillery – Anti Aircraft, Anti-Tank, Counter Battery, Divisional Locating capabilities, field, garrison, and the heavies.



Above: Gunners of the 36th Siege Artillery Group, with a 9.2 inch howitzer, the heaviest gun operated by the RAA, with a range of 9,000 meters for it's 130kg shell.

Below: Gunners of 2/4th Field Regiment at Balikpapan with the 25 pounder short.





Research is ongoing but the initial list of likely episodes include:

- South Africa / A Bty / the private Batteries pre Federation
- Bullecourt – comparing and contrasting poor staff work with the work of Bruchmueller on the Eastern front
- Hamel – surprise and coordination
- Brallos Pass – artillery in the defence
- Divisional Fire planning with 9th Div at El Alamein
- The guns of Ioribawia / Kokoda – the morale impact of receiving artillery support vs receiving artillery
- Nadzab air insertion – flexibility along with domestic supply chain given that the 25 pounder short was made in Victoria
- Korea – I am still looking for the right battle to discuss
- Defence of FSB Coral / Battle of Long Tan
- A good account if possible of Aus gunners spt to British in Helmand
- Air Defence – Darwin? Is there something better? Given we may lose air superiority at some stage, and it has been Korea since the infantry have looked up at a plane and wondered if it was friendly
- Arty Int and CB fires. Potentially looking at the CBSO (Counter Battery Staff Officer), with sound ranging and flash spotting
- The final episode will look at the contemporary threat and opportunities in the near peer sphere, eg Armenia or the Zelenopillya rocket attack to highlight the future for integration, ISTAR and long range fires.

I am currently looking for information about the above engagements and suggestions for other engagements that would be worthy of inclusion on the list.

The podcasts will be published at <https://theprinciplesofwar.com/> and are expected to get over 100,000 downloads. This represents a significant opportunity to educate Army and the public about the role that Artillery has played in the last 150 years and more importantly highlight the opportunity, requirement and necessity for maintaining and developing the capability in the future.

If you can assist contact James Eling at [james.eling@defence.gov.au](mailto:james.eling@defence.gov.au)



**Australian Gunners**  
(Serving or Retired)

**YOU ARE INVITED TO CELEBRATE THE**

**150th Anniversary of Australian Artillery in 2021**

**Mark Your Diary**

**National Events**

Where: Canberra, Venues - RAA National Memorial & AVMM  
**WHEN: SUNDAY 1ST AUGUST 2021**

Where: Sydney, Venue - Victoria Barracks  
**WHEN: SATURDAY 6TH NOVEMBER 2021**

**Note:** More detailed information including timings will be provided when available throughout 2020 and 2021

**Unit & Association Events**  
Throughout 2021 as advertised by those individual coordinating organisations.

**CANBERRA**  
1st August 2021  
Commemorative Service at RAA National Memorial  
**Mount Pleasant**  
Synchronised National Ceremonial Fire Plan  
**Mount Pleasant & all RAA Unit Locations**  
Last Post Ceremony  
**Australian War Memorial**

**SYDNEY**  
6th November 2021  
Formal Parade & Drum Head Service  
Incorporating the presentation of a new Queen's Banner  
**Followed by**  
150th Cocktail Party  
**Victoria Barracks**

**FURTHER INFORMATION**

Contact  
RAA HOR Staff  
via email at [raa.hor@defence.gov.au](mailto:raa.hor@defence.gov.au)



**Australian Gunners**  
(Serving or Retired)

**YOU ARE INVITED TO CELEBRATE THE**

**150th Anniversary of Australian Artillery in 2021**

**Mark Your Diary**

**National Events**

Where: Canberra, Venues - RAA National Memorial & AVMM  
**WHEN: SUNDAY 1ST AUGUST 2021**

Where: Sydney, Venue - Victoria Barracks  
**WHEN: SATURDAY 6TH NOVEMBER 2021**

**Note:** More detailed information including timings will be provided when available throughout 2020 and 2021

**Unit & Association Events**  
Throughout 2021 as advertised by those individual coordinating organisations.

**CANBERRA**  
1st August 2021  
Commemorative Service at RAA National Memorial  
**Mount Pleasant**  
Synchronised National Ceremonial Fire Plan  
**Mount Pleasant & all RAA Unit Locations**  
Last Post Ceremony  
**Australian War Memorial**

**SYDNEY**  
6th November 2021  
Formal Parade & Drum Head Service  
Incorporating the presentation of a new Queen's Banner  
**Followed by**  
150th Cocktail Party  
**Victoria Barracks**

**FURTHER INFORMATION**

Contact  
RAA HOR Staff  
via email at [raa.hor@defence.gov.au](mailto:raa.hor@defence.gov.au)



# Around the Regiment

## 1st Regiment RAA

Many of us have been confronted with unexpected challenges and a significant departure from the comfortable normal. Thriving in uncertain, unusual circumstances, the Gunners of the Premier Regiment have responded to the demands encountered in 2020, demonstrating adaptability, resilience and dedication to the various missions and tasks encountered. Despite, the disrupted training year, individual course attendance has been largely unaffected, allowing rank and trade progression to continue.

### Op Bushfire Assist

The Snowy Mountains region was severely impacted by the 2019/20 fire season. The prolonged severity of the fire season saw the ADF called to assist in the government's response and at short notice members of the Regiment responded. Many were recalled from Christmas leave to deploy to NSW. The responsiveness and willingness was impressive, largely driven by the urge to support the Australian community at a time of need.

Personnel from the Regiment provided support to bushfire recovery efforts in some of the worst effected regions in Southern NSW. During the deployment, members of the Regiment undertook tasks such as tree felling, route clearance, fencing, clearing firebreaks and helping clean up properties. Their assistance contributed to a large volume of route

clearances as well as logistics relief which included the delivery of provisions to farmers.

Some members of the Regiment were also involved in liaison work with local authorities and logistics planning. Communication between authorities and the local communities was vital during this time. Members conducted hundreds of door knocks to ensure the immediate safety and wellbeing of residents, many of which were isolated by cut roads and damaged telecommunications infrastructure.

In total, over forty members of the Regiment deployed on Op Bushfire Assist for nearly three months.

### Op COVID-19 Assist

Due to the resurgence of COVID-19, the Queensland Government tightened restrictions on cross-border travel in late June. The ADF were requested for assistance and the Regiment was once again required to support a domestic operation. A Task Unit Headquarters, with one

Battery, totalling approximately 150 members was quickly force assigned to support the Queensland Police Service (QPS) on the Police Checkpoints (PCPs) along the Queensland and New South Wales border. Working under a Company Headquarters based in Roma, three platoons were allocated to provide support to the QPS in Dirranbandi, Warwick and Goondiwindi. These platoons integrated well with the QPS, emergency services and the locals, and thoroughly enjoyed their new 'country' lifestyle.



Bombardier Stewart and his Section conducting route



**A Police Check Point on the Gold Coast**

In addition to the western check points, personnel were deployed to the Gold Coast to support five more border checkpoints on the NSW/QLD border. The Platoon Headquarters and five sections were based out of the Tallebudgera Recreation Centre. Though a high tempo was maintained, many members were able to enjoy some of the benefits of coastal living with some members learning how to surf during the operation.

---

*These platoons integrated well with the QPS, emergency services and the locals, and thoroughly enjoyed their new ‘country’ lifestyle.*

---

OP COVID-19 Assist was not a task the Regiment traditionally trained for, but the versatility and adaptability of soldiers and officers of the Regiment was exemplary. In particular, the members deployed to the Gold Coast endured long shifts and a vast amount of local and inter-state traffic. Each vehicle stopped at the checkpoint poses a new challenge, however, the members of the Regiment were pro-active in learning the updated restrictions and providing fellow Australians factual and reliable advice.

## **Bridging Reset in the “New Normal”**

Following the deployment of many members of the Regiment in 2018-2019 on OP OKRA, and recovering lost training opportunities from the disruptive effect of elevated fire danger during the 2019 regimental exercise, 2020 was designed to build the standard of gunnery, through both individual and collective training.

That marvellous plan was disrupted by two domestic operations and COVID restrictions and necessitated rapid contingency planning

and some innovative methods to squeeze out some training opportunities.

As QLD ventured into the “new normal” in June 2020, the Regiment fought hard to seek approval from the Forces Commander to be the first unit to conduct field training in a COVID-19 compliant manner. The Regiment managed to conduct live fire training at Wide Bay – inclusive of FO’s quick-fire planning and a direct fire practice. External factors limited the objectives of the exercise, which was still a great opportunity to dust off rusty skills and acquaint the team with the basics of their core business.

There are many challenges to training an artillery regiment in a capital city. Not least amongst these is the lack of training space immediately available to conduct combined arms training. We have managed to overcome this challenge in 2020 by utilising the simulation facilities available to us.



**104 Bty at Wide Bay in June**

*Blended Live / Simulated CT Attacks.* The Battery Commanders appreciated that standing behind a JFT and issuing a target to them did not constitute training for advanced warfighting. Leveraging the relationships that had been built with the manoeuvre units, the BCs put together a series of training days that blended live reconnaissance with simulated combined arms planning and execution. The gun lines played enemy and occupied a platoon defensive position within the Enoggera Close Training Area. Meanwhile, the JFT and CT Commander received a BG order to clear said platoon position. This provided the JFT and OC an opportunity to conduct a reconnaissance of a live enemy, conduct appreciation and develop a plan for their attack. This plan was then executed in the DOME trainer.





**Lieutenant Colquhoun (104 Bty) Back Briefing the Brigade Commander during Exercise Diamond Dawn**

*Ex DIAMOND DUSK/DAWN.* The tactical groups of the Regiment were able to mitigate the lack of training space for combined arms activities by taking part in Ex DIAMOND DUSK/DAWN. This saw a series of TEWTs at Bde, BG and CT level. Many members of the Regiment rediscovered their permanent markers and methylated spirits bottles for the first time since ACCC or SUB 1. The result was a building of the combined arms team as the corroborated to integrate effects and manoeuvre.

*Tactics Week.* The great tactical planning work done by the JFECCs and JFTs was finally implemented during the Brigade Tactics Week at Canungra. This saw a series of offensive and defensive TEWTs conducted in the Gold Coast hinterland. These TEWTs were then inputted into Canungra’s simulator to test commander’s and staff’s ability to execute combined arms operations. 104 Bty supported BG RAM in a death match against 105 Bty who were supporting BG HEELER. After multiple engagements up and down the Kerry Valley BG RAM emerged victorious with BG HEELER still licking their wounds.

## Community Engagement

The Regiment continued to support the Fort Lytton Historic Military Precinct which should be considered the spiritual home of the SE QLD gunner. Over the Christmas break members of the Regiment undertook a working bee to help restore the historical precinct.



**Members helped to restore the historic Fort Lytton**

In February, the Officers and SNCOs of the Regiment conducted the Commanding Officer’s Retreat within the confines of this colonial fort. For those who were new to Brisbane this was a great chance to become acquainted with the military history of the region. Gunners defended the mouth to the Brisbane River for over a hundred years and the current members of the Regiment are heirs to this legacy. To assist the Fort to complete the collection of every artillery piece that has served within QLD, the Regiment will be permanently loaning a L5 Pack Howitzer and a L119 Hamel Gun to the Precinct.



**The Band Showing Southport State High School how it is done**

The Band of the 1st Regiment continued to provide continuous engagement with schools, regional communities, and defence recruiting opportunities. The contribution of our “Sixth Battery” to the civilian population’s positive perception of the Army cannot be understated. While the Band’s usually busy dance card has been disrupted by COVID-19, the team has successfully relocated facilities from the much-loved Band Hut that served them so well for 32 years. After being evicted in April, the Band is now collocated within Barce Lines which is a fantastic outcome. Also supporting integration between the Band and the remainder of the Regiment is the fact that many members of the Band deployed on OP COVID-19 ASSIST.



Despite the challenges of 2020, it has been a year of opportunity for the Regiment to engage with different Australian communities. From providing much needed community support during OP Bushfire Assist to living within small towns and communities during OP COVID-19 ASSIST, it has been a highlight for many members of the Regiment. Another opportunity saw members of ‘A’ Bty take part in an impromptu blood donation drive in February—potentially saving the lives of dozens of unknown strangers.



‘A’ Bty’s Impromptu Blood Drive

Another notable achievement this year was the contribution members of the Regiment made to the development of the digital safety process that will finally permit the long overdue retirement of the safety board and fan. The new system is far superior that the old in terms of accuracy and timeliness. It reduces the opportunity for human error and is able to support practices involving precision munitions and course correcting fuses.

As 2020 draws to an end, it is evident the Regiment has taken full advantage of the circumstances and made a sizable contribution to some domestic events that will be remembered in many years. On the flipside, there is no denying that disrupted training has lead to a big task to build the individual and collective proficiency of the Regiment. While a big job, it is achievable, and with all things going well, the 2021 training program will see the Regiment at ATL 5 by early June!

---

# 9th Regiment RAA

## Regimental Headquarters

2020 has proven to be a busy and successful year for the 9th Regiment, Royal Australian Artillery, with significant contributions made to Domestic Operations, modernisation initiatives and operational deployments.

Operation Bushfire Assist was 9th Regiment’s first major commitment, commencing in December 2019 and continuing through to February 2020. The Regiment rapidly force generated Emergency Support Forces in New South Wales, Victoria and South Australia, deploying 103 personnel in support of the Joint Task Force response to the widespread bushfire threat. Members from all Batteries were keen to support their local communities and their State and Territory agencies, deploying personnel in staff roles inside numerous headquarters and general duties in the field. The Unmanned Aerial Systems capabilities established in 2019 were also successfully deployed in Joint ISR Support Teams in both New South Wales and Victoria, delivering timely updates and surveillance of the fire fronts.

---

*... all Batteries were keen to support  
their local communities ...*

---

Come March, this time under Operation COVID-19 Assist, again 9th Regiment responded to the call to support Joint Task Force 629, as it formed Joint Task Groups to support each State and Territory’s response to COVID-19. Most of Regimental Headquarters, including the CO, OPSO, OPSWO, S7 and UAS Cell formed part of the newly established Headquarters of Joint Task Force 629 under MAJGEN Kenny. Within each of the states, the Batteries contributed 91 personnel who supported police border checkpoints, quarantine monitoring, and staff planning functions. For BC 3 Battery’s (WA) contribution to Joint Task Group 629.6, Major Duncan Anderson was awarded an Australian Defence Force Bronze Commendation; his high performance and dedication saw the establishment of an Effects Cell within the headquarters, and his outstanding performance as the ADF’s LO to the Emergency Service Coordinator.

When not supporting operations, modernisation and consolidation have been two key driving factors in the 9th Regiment's success in 2020.



**SUAS Operations Underway**

Building on the success of UAS trials in 2018-19, 9th Regiment has further developed the UAS framework of governance and airworthiness, training and standardisation. This effort has culminated in COMD FORCOMD approval on 20 Oct 2020 to establish a permanent UAS capability in 9th Regiment. The UAS capability will continue to support 2nd Division's commitment to Domestic Operations and augment the Artillery Light Observers surveillance and reconnaissance capability and support to the Mortar Line. This capability will be supported by a standards cell located in Regimental Headquarters which will provide the ongoing standardisation of training and assessment, and airworthiness governance and assurance functions critical to maintaining the safe operation of the UAS capability in all of the 2<sup>nd</sup> Division.

2020 has been a year to remember and without the support and dedication of every soldier and officer within 9th Regiment, we would not have been able to complete the tasks we have while concurrently setting ourselves up to support the High Risk Weather Season and OPLAN MAGPIE.

## 5/11 Battery

For 5/11 Battery of the 9th Regiment, Royal Australian Artillery, 2020 has been an experiment in time dilation, as it has been for many of our peers. An early escalation in the start of the year was quickly followed by a cease firing on all activity, and an inevitable acceleration. The year has been characterised with a focus on Domestic Operations (DOMOPS) support, preparedness for future DOMOPS capability, and the integration of novel training activities into our FORGEN cycle.

The start of the year saw an early celebration as 5/11 Battery was awarded the Mount Shank Trophy. As incumbents for the award it was again great to see the Battery receive this recognition for maintaining the highest of standards in proficiency and capability within 9th Regiment.

Soon after the award of the Trophy the focus shifted from our intended path of Foundation War Fighting in support of BG Cannan and Talisman Sabre 20, to the rapidly escalating demands of DOMOPS. As the Call-Out for OP Bushfire Assist reached 9th Regiment, 5/11 Battery supported our peers in South Australia with personnel deployed to Kangaroo Island. As was the case for many this activity evolved over time but was focussed on supporting the regeneration of community capability on the island with soldiers employed clearing routes, maintaining boundaries, repairing fencing, removing debris, and disposing of dead fauna, to name but a few tasks the Battery undertook.

As OP BUSHFIRE ASSIST ramped down OP COVID ASSIST ramped up, with JTG629.3 (QLD) seeing further support from 5/11 Battery. The support was at all echelons of the operation, with personnel in JTG HQ, in the Task Unit, and on the frontline. Gunners, NCOs and Officers, supported the Queensland Police with border restrictions, biosecurity checkpoints and quarantine compliance. The contribution was significant with our furthest element being based as far as Windorah in Western Queensland, 1200km from Brisbane.

Concurrent with DOMOPS support, the Battery worked diligently on FORGEN training and DOMOPS preparedness. While we had early success with a remote learning program, the advantage for the Queensland Battery was a quick transition back to Business-as-Usual training.





**GNR Theaker – LFX WBTA**

In short order the Battery ran rank-and-trade courses for Basic Observer and Mortar Command Post, and supported the ROBC and ROGC Mod 5. There has also been an ongoing commitment to our UAS training and currency with a focus on MRUAS and Black Hornet 3 to a standard that has set the bar for 9th Regiment. There has also been a significant effort in preparing the force for DOMOPS and OPLAN MAGPIE with training in Combat Shooting, Army First Aid, Tactical Care of the Combat Casualty, and Army Combatives.

The Battery has without doubt had a busy year, in addition we have supported our readying commitments with attendance at EX Silicon Brolga and EX Vital Prospect to achieve ATLS 3C with a Live Fire activity at Wide Bay Training Area (WBTA) late October to ensure we maintained some key core skills as Gunners.



**Observer Training**

With the conclusion of the year fast approaching we will also farewell some key staff: Major Christopher Flear (BC), Warrant Officer Class Two William Davies (BSM), Captain Jordan Lynch (IG), and Warrant Officer Class Two Mark Wheeler (SMIG). We also look forward to welcoming some new members to the team Major Andrew Crowe (BC), Captain Mathew Smit (IG), Warrant Officer Class Two Mark Green (SMIG) and already in post on promotion Warrant Officer Class Two James Murdoch (BSM), we wish them all the very best the Army Reserves can offer.

All told, the pacing of the calendar year has been consistent with these “unprecedented times” we are all experiencing but 5/11 Battery has come through accurate, responsive, dependable, and Joint.

### **3 Battery**

*“Clear, consistent,  
challenging”*

2020 started innocently enough with the Bty prepared for its annual salute at Kings Park, training program was locked in and we were fortunate to have time and resources to support a challenging year!

**Operations.** A phone call from BC 6/13 Bty to BC 3 Bty on Friday the 10<sup>th</sup> of January triggered what would be an incredible year, highlighted by support to Domestic Operations. Within three days, 3 Bty had formed two sections and deployed them to South Australia as part of OP BUSHFIRE ASSIST. These soldiers spent a majority of time on Kangaroo Island with some staying on for a second rotation. This highlighted the immeasurable commitment to service by reserve soldiers, who with less than 72 hours’ notice were ready to deploy for an unknown period of time.

The Bty was scheduled to parade on 25 Mar 20 as part of its first Live Fire Exercise battle procedure. Prepared for deployment to the field, the Bty had vehicles, personnel and a C2 structure ready. Concurrently 13 Bde was receiving requests for assistance as part of the Western Australian response to COVID-19. The Bty paraded at Hobbs Artillery Park and for the first time while socially distanced, checked its recall register and was dismissed.

3 Bty members were recalled early the next day and commenced tasking shortly thereafter. Deploying drivers, watchkeepers and planners,



the Bty soon formed as a defined sub unit within the initial Joint Task Group (JTG). Bty HQ commenced extended operations providing C2 and generating logistics capability while establishing an Effects Cell as part of the JTG HQ. As the Joint Task Force (JTF) HQ established, JTG structures nationally were standardised. 3 Bty commenced 'routine' COVID support operations in Western Australia. Support to OP COVID ASSIST finished on 30 Oct 20 when the final member demounted.

3 Bty also deployed three personnel to TSE99, capping an incredibly busy period for a committed sub unit.

**Training and ceremonial.** Training and ceremonial commitments, while disrupted continued throughout 2020. 3 Bty continues to build relationships in the Joint environment in Western Australia through support to JTAC exercises and delivering indirect fire observer training. Support to ceremonial activities was provided concurrently with the Australia Day Salute and marching as part of 'Gunner's Day'. 3 Bty will round out the year with the conduct of two live fire exercises, the conduct of courses, support to 13 Bde units and the 'Feast of St Barbara' led by the RAA Association of WA in Hobbs Artillery Park.

**Future.** 3 Bty will continue to build UAS and 'Effects' coordination capabilities, including integration of AFATDS into routine Bty operations and training.

## 2/10 Battery

Well it has definitely been a unique year. 2020 has presented the members of 2/10 Battery with multiple challenges, not only in the barracks and field environment but also in a personal and professional capacity.

The beginning of the year saw soldiers from the Battery step up to support the civilian population on OP BUSHFIRE ASSIST. We were very proud of the tireless commitment made by many members who were able to support in multiple capacities. Many soldiers supported in any way they could fulfilling general duties roles to support the firefighters and other civilian agencies. Other soldiers were able to employ their skills in operating unmanned aerial systems. This enabled 2/10 Bty to support the civilian agencies in such tasks as road analysis and clearance and fire spotting.

It felt barely like a heartbeat later after the fires that the world was struck by COVID 19. This virus, as for everyone around the world presented us with challenges. Due to the unique nature of the extended lockdown in Melbourne a comprehensive remote learning training package was implemented by the senior staff. This allowed our senior soldiers to continue to engage and train the junior soldiers in a variety of areas. This kept the soldiers engaged which meant they could progress their knowledge and skills in many areas such as leadership and planning.

Now finally Melbourne is coming out of lockdown, we can look to the future and prepare for our next commitment. 2/10 Battery is ready to support any emergency associated with the High Risk Weather Season and is currently readying itself for OPLAN MAGPIE. Our members have learnt from their earlier experience with bushfires and are again prepared to support the civilian agencies if they are called upon. Finally, we are excited about recommencing physical training and we hope in early 2021 we will be able to employ our skills as mortar operators in the field environment.

## 6/13 Battery

Like for many around the globe, 2020 has been a year like no other for 6/13th Battery. It has been a year of lockdowns, geographic isolation and online training whilst providing personal to support domestic operations – OP BUSHFIRE ASSIST, OP COVID ASSIST and OP SOVERRIGN BORDERS.

The year commenced with a new command team led by incoming Battery Commander BC, MAJ Mark Lee; supported by incoming Battery Sergeant Major, WO2 Brett Thomas; Instructor Gunnery, CAPT Eleanor Tegg; and Sergeant Major Instructor Gunnery, WO2 Daniel Hughes. The new command team soon 'meshed', despite geographic dislocation, and soon had personal on domestic operations.

The onset of COVID-19, and resulting lockdowns and border closures, ironically had a positive impact on the Battery. The South Australian and Tasmanian border closures essentially meant that personal could not travel interstate to attend courses, exercises and other training activities. This resulted in personal remaining within the Battery for much of 2020 and thus achieving stability and continuity (not often seen in the sub-unit environment).

For much of April, May and June, the Battery was mostly in lockdown. Initially key personal worked from home with JNCO's and diggers continuing to parade and train. However, as restrictions increased, the JNCO's and diggers also had to parade at home and Remote Learning and Training (RLAT) was embraced. Arguably, the Battery led the way in implementing RLAT within 9 Regiment RAA. The battery conducted the first RLAT for all members of the Regiment, being Customs and Traditions off the RAA of course, as well as the first Professional Military Education for Officers and SNCOs – a presentation on the employment of the Royal Artillery in the Falkland Islands War by the BC and IG.

In 2020, several Battery personal deployed, and continue to be deployed, on OP COVID ASSIST. Personal in Tasmania led the way early in support of hotel quarantine and contract tracing and following a period of stability in Tasmania, are again supporting hotel quarantine for returning international travellers. Personal in South Australia deployed in support of operations on the South Australian / Victorian border.

For those who were not available to support operations, training during the period July to September focused on preparing personal for the impending High Risk Weather Season (HRWS). This included formal training in Soldier Combat Ensemble (SCE), Combat Marksmanship Continuum (CMC) Gap Training, Army Combative Program (ACP) Levels One and Two and Army First Aid (AFA) / Tactical Combat Casualty Care (TCCC). Also during this period, the Battery enhanced its Unmanned Aerial Systems (UAS) capability by qualifying personal and maintaining currency on the Multi Rotor UAS.

With most personal now trained to support domestic operations, training has shifted to Foundational War Fighting (FWF) and will remain the focus of training through until mid-2021 (before refocusing on preparation for the next HRWS). Due to the dispersed disposition of the Battery, any training opportunity with flanking units is actively explored. In Tasmania, elements of the Battery are closely linked to 12<sup>th</sup>/40<sup>th</sup> Royal Tasmanian Regiment, and in South Australia training has included collaboration with 7 RAR Mortar Platoon (located a nearby RAAF Edinburgh). In 2021, the Battery will seek to enhance its relationship with 16 Regiment RAA through support to

ongoing Light Counter Mortar Radar (LCMR) / Light Multi Mode Radar (LMMR) trials.

6/13 BTY is not without its issues. Recruiting remains an ongoing concern, particularly with regards to Artillery Forward Observers (AFO), and equipment shortages are ongoing (common to 2<sup>nd</sup> Division). The retiring vehicle legacy fleet and maintaining driver qualifications continue to be the biggest challenges for the Battery.

Finally, on behalf of the soldiers and officers of 6/13 BTY, I wish fellow members of the RAA a safe Christmas and prosperous 2021.



## 7 Battery

Earlier in the year 7 Battery deployed a significant number of its personnel as part of ADF's OP BUSHFIRE ASSIST in response to the summer's hot weather and bushfires. While these disasters affected much of the east coast of Australia and brought devastation to hundreds of communities, the inclement weather also prevented a number of the Army's live fire activities from proceeding. The subsequent COVID-19 restrictions implemented in March had also forced a pause in the Battery's training schedule. This activity was therefore 9<sup>th</sup> Regiment's first live fire activity for 2020 and the first time the Gunners were able to apply their technical skills after the extended 'time off tools'. The activity also presented an opportunity for the Battery's newest Gunners to drop their first mortar rounds and satisfy the live fire component of their initial employment qualifications. GNR Darcy Lewis, who had completed his mortar training in August 2019, said "I really enjoyed my experience on the tube and dropping my first bombs. I thought it was organised pretty well and the weekend ran smoothly".

The LFX occurred over the weekend of 4 and 5 July 2020 and saw 7 Battery, 9<sup>th</sup> Regiment RAA deploy to Singleton Training Area to provide a mortar line in support of the School of Infantry's Regimental Officers' Basic Course (ROBC). The ROBC trainees were occupying a

platoon defensive position and 7 Battery was tasked with providing on-call defensive fires directed by the Battery's Artillery Fires Team (AFT). The training represented the course's culminating activity and 7 Battery was able to implement its 81 mm mortars as part of a Combined Arms firepower demonstration for the Army's newly qualified Infantry officers which also included 12.7 mm HMG and Javelin anti-armour rockets.



The Battery deployed prior to first light on Saturday morning, occupying a position under the inevitable cover of weather which accompanies all training – rain. The light precipitation lifted quickly however as the Battery established its baseplate locations, conducted sight tests and came into action.

Firing a mixture of High Explosive and Red Phosphorus rounds, 7 Battery spent the morning registering targets before providing timely and accurate fire as part of the defensive fire plan.



Located within the platoon defensive position, the AFT was able to observe not only the fall of shot from the mortars but also the range of direct fire weapons implemented by the Infantry and how artillery contributes to the Combined Arms Effect.

The weekend also enabled 7 Battery to conduct concurrent currency training for its Multi-Rotor Unmanned Aerial System (MRUAS) operators. This resource was most recently employed by 9<sup>th</sup> Regiment RAA during OP BUSHFIRE ASSIST to locate fire-affected koala populations in NSW and Victoria. Over the course of the activity the MRUAS operators were able to practice their flying skills while also capturing aerial footage of the Battery in action. The Battery closed out the weekend on Sunday morning by refreshing its technical procedures for hasty deployments, conducting a dry fire crash action in response to calls for fire from the AFT.

7 Battery's contribution to the ROBC was well-received by the School of Infantry, presenting the likelihood of being invited to participate in further Combined Arms live fire activities in the future.



## 23 Battery

The emphasis of 23 Battery's activities for 2020 has been supporting the Australian community, demonstrating both the adaptability of our soldiers and their commitment to the society in which they live. This service has involved deployment on two major operations – utilising existing artillery skillsets in different contexts – and training for the 2nd Division's new focus on Domestic Operations (DOMOPS).

This year started at full speed this year with members of the Battery deploying on OP BUSHFIRE ASSIST. From 6 January, two teams were deployed as Civil Military Cooperation (CIMIC) liaison officers (LO).



One team operated west of Sydney near Lithgow, and one team ventured north to Port Macquarie. Despite having no prior CIMIC training or experience, they rapidly and successfully integrated with federal, state and local authorities to coordinate DACC support to local communities. They worked in pairs, travelling considerable distances each day, and liaised closely with fire affected communities to identify and prioritise requests for ADF support.

Later in January, 23 Battery personnel joined the 9<sup>th</sup> Regiment Emergency Support Force (ESF), providing unmanned aerial system capabilities in conjunction with their 7 Battery colleagues as well as chainsaw operators and staff officers. The ESF initially operated near Cooma attached to the 2nd Combat Engineer Regiment Task Group, conducting a koala search and rescue mission near Numeralla, then guarding the site of a C-130 air tanker near Peak View. The ESF worked closely with the 20 REGT detachment (as Team Ubique) contingency planning for fires reconnaissance near the Orrral Valley bushfire outside Canberra. It finished the operation on recovery tasks around Lithgow. These activities demonstrated the ability of both batteries to operate together and with their Regular Army comrades in a joint operational environment.

The Battery had barely reconstituted when COVID-19 struck. 23 Battery supported OP COVID-19 ASSIST in New South Wales and the Australian Capital Territory from its beginning, and at the time of writing two members remain force assigned. The main effort for the operation was initially security of quarantine hotels. Once security was handed over to civilian companies, the main effort changed to assisting with international arrivals. OP COVID-19 ASSIST has proved a varied assignment, which in addition to security and escort duties has involved traffic diversion and the calming of frayed tempers alongside police colleagues.

Amidst the challenges of COVID-19 the battery has kept its eye on capability. It switched without pause to the remote learning and training environment, and back again, and has prepared for further challenges by conducting training to develop skillsets applicable to domestic operations. These have included the Army Combatives Package, Combat Marksmanship Continuum Training, and Army First Aid requalification. The battery stands

ready to continue its contribution to the regiment, the army and the wider community.

## **Remote Learning and Training**

With the 2nd Division suspending Tuesday night and collective training due to the COVID – 19, 9 Regiment began researching and investigating alternate methods and platforms that would allow a Regiment with six battery's spread across 13 locations around Australia to maintain some semblance of normality in training.

GovTeams was selected to deliver Remote Learning and Training (RLAT) on Tuesday nights, each Battery was tasked to select topics suitable for RLAT and GovTeams that would then be delivered to the whole Regiment each Tuesday. Concurrently 9 Regiment capitalised on the COVID – 19 situation by also delivering PME to the Regiment's SNCOs and Officers one Thursday per month via GovTeams, again each Battery selected a topic, delivering the PME to the digitally assembled SNCO and Officers of the Regiment. RLAT and PME has allowed the Regiment to maintain a sense of normality in what are most definitely not normal times, it has allowed the Regimental Command team to see Battery Commanders and other Battery members deliver training and education, furthermore and more importantly 9 Regiments members reported (through RLAT AARs) a feeling of connectedness to their fellow Battery and Regiment members by participating in RLAT sessions. With the advent of VERA and VERA Teams, 9 Regiment will move to making VERA Teams the primary delivery method due to its higher security classification, with GovTeams a backup means to deliver RLAT and PME.

The weekly CUB and ARA synchronisation meetings have been trialled on VERA teams with good success, however as VERA and VERA Teams is a very new system to the ADF it continues to develop and grow into a seamless platform. There has been some issues for members gaining access to VERA Teams, the VERA support team have been working closely with 9 Regiment to resolve these issues and it is expected that all members will have easy and seamless access to VERA Teams by December 2020.

The S7 cell with support from all Battery's Cadre staff has made excellent progress in digitising Light Gunner career courses in order to reduce the amount of time that SERCAT 5

members are away from their primary employment on course. The S7 cell and Cadre have liaised with multiple organisations including the School of Artillery in creating an ADELE and RLAT delivered Light Gunner ROBC course with five 9 Regiment Lieutenants successfully taking part in the online components of the course. The ROBC students took part in ADELE course content and also received RLAT instruction from each battery's Cadre staff, allowing the inculcation of not only LMP content but Cadre Regiment experience. The S7 cell is working hard to digitise other Light Gunner courses, reducing the financial cost per course but even more importantly helping SERCAT 5 members better maintain their Work, Work, Life Balance.

## SUAS Capability

On 20 Oct 20 COMD FORCOMD approved the SUAS Capability in 9 Regt, to bring this SUAS capability to fruition, each Battery will establish Joint ISR Support Teams (JIST) of six personnel, comprising a C2 node and two UAS teams. The SUAS capability within 9 Regt will provide 2 Div with an aerial ISR capability to support Domestic Operations and Foundation Warfighting. 9 Regt will receive four Wasp Systems in 2021 which will replace those some of those on loan from Combat Support Program and Aviation Branch. SUAS will provide reserve gunners with a new and exciting direction and one that will continue to grow in an environment that is anticipated to become more uncertain.

IX

Thinking about leaving the ARA but still enjoy soldiering?

Then Join 9th Regiment RAA Up to 100 Days a year

Keep Trade and Rank Pay while converting

As an Officer Flexible parading options available

Mortar Operator

Artillery Observer

Clerical or Quartermaster staff

We have positions in Sydney, Newcastle, Canberra, Melbourne, Adelaide, Tasmania, Perth and Brisbane, Southport.

Interested? Give the URLO a call or email and we will assist in your transition.  
Contact WO 2 George O'Connell: george.oconnell1@defence.gov.au  
Tel: 0408 163 441

# 16th Regiment Royal Australian Regiment

*Lieutenant Colonel Mark Mankowski  
Commanding Officer*

When 16 Regiment RAA wrote its last submission to the Liaison Letter, we had just disbanded 16 Regiment Emergency Support Force as part of Operation Bushfire Assist and we were about to re-start force generation training. Instead we, like all RAA units, were deeply affected by the COVID-19 virus from late March / early April. For seven weeks 16 Regiment RAA worked from home. It was an extraordinary achievement that the unit's leaders were able to keep our personnel fit, engaged and well-led over that period.

Later we were required to support the SA Government as part of the ADF's support to Operation COVID-19 Assist. MAJ Arron Kinleyside (BC CSS Battery) will discuss the small planning teams from the unit that were committed to South Australian Health Network to help plan for an outbreak of the pandemic in South Australia.

Next, MAJ Owain Griffiths (BC 111 Battery) will cover the unit's support to the South Australian Police to help secure the border with Victoria. This was another integrated and joint team provided by regular and reserve forces.

We still managed to conduct our core training, which is to generate Ground Based Air Defence (GBAD) and Air-Land Integration force elements. MAJ Nick Wells (BC 110 Battery), discusses our GBAD Live Firing Exercise up at Woomera in August 2020.

I continue to be impressed by the excellent young Gunners, Privates, Signallers and Craftsmen in the unit. WO1 Gavino Mura highlights the results of this year's Haydon Shield Competition and some of the other honours and awards bestowed on members of the unit.

I will conclude with a short piece on the transformation of 16 Regiment RAA from a GBAD capability based on RBS 70 to an Integrated Air and Missile Defence (IAMD) based on the enhanced National Advanced Surface to Air Missile System (NASAMS).

This is a vanguard project of the Artillery Modernisation Plan and despite COVID-19 restrictions, the project is still on track for an Initial Operating Capability in 2023.

As I write this introduction in November 2020, the unit is once again working from home as we comply with the SA Government's 'circuit breaker' restrictions and we are simultaneously planning to support the local joint task group (JTG 629.4). The work we supported earlier in the year with SA Health is paying off and that is the topic for our first article.

## **16 Regiment RAA Support to Joint Task Group 629.4 – Operation COVID ASSIT 19 (Part 1)**

*Major Arron Kinleyside*

On 25 March 2020, when the gravity of COVID-19 was realised by the South Australian Health Authorities, the Australian Defence Forces were called to assist in Operations and Logistics Planning in support of South Australia's Health response. MAJ Talal Moutrage (OPSO 16 REGT RAA), MAJ Arron Kinleyside (BC CSS 16 REGT RAA) and CAPT Michael O'Callaghan (BK CSS 16 REGT RAA) were called to assist in the State Control Centre – Health receiving in-briefings from the South Australian Deputy Chief Public Health Officer Doctor Evan Everest (an ex-Reserve Officer with HQ 9 Brigade).

CAPT O'Callaghan was allocated to the Royal Adelaide Hospital as a part of the Central Adelaide Local Health Network and the primary COVID response hospital for the state.

MAJs Moutrage and Kinleyside were allocated to support the Southern Adelaide Local Health Network (SAHLN) consisting of over 7000 staff which encompassed Flinders Medical Centre, Noarlunga Hospital, the Repatriation Hospital, GP Plus clinics and other medical facilities in the South of Adelaide region.

The Majors were quickly introduced to the Executive Staff of SAHLN and the Incident Management Team (IMT) led by their CEO Professor Susan O'Neill, who were relieved to receive support from the ADF. The IMT was convened daily with Clinical, Infectious Disease and Public Health Specialists, Corporate Services, Project Managers, Chief Operations Officer, and others to manage the huge organisational re-alignment in preparing for a mass COVID-19 outbreak. The re-alignment included re-organising and

engineering wards with negative pressure rooms for infectious patients, establishing several COVID testing clinics, limiting hospital entrances and establishing a concierge to limit visitors and reduce theft of PPE from the hospital (mainly hand sanitiser), establishing a Hospital at Home service for positive patients that were in reasonable health to quarantine outside of hospitals, establishing a Caravan Park medical service for International tourists and positive patients to quarantine away from their families whilst infectious, and many other initiatives to build capacity for the Local Health Network to respond to the crisis.

MAJ Moutrage worked closely with the CEO and Operations Planning staff in preparing their response strategy and ensuring that the vital linkages between the SAHLN IMT, the SA Health Authorities and State Control Centre were functioning correctly. MAJ Kinleyside worked with the Logistics, Corporate Services and Operations staff to remediate Personal Protective Equipment shortages by introducing improvements to supply chain processes to build the confidence from staff that they had the right Personal Protective Equipment (PPE) provided to them, on time and every time in order to protect themselves and their patients from the virus. CAPT Boris Lopez (A/OPSO JPEU Port Wakefield) joined the team in April and led the IMT Planning Staff through an abridged JMAP cycle in order to develop a Campaign Plan for SAHLN which was nested with the State Control Centre's Strategic Plan.

The Operation was an excellent opportunity for Defence to partner with a Health led response to the COVID-19 Pandemic and give confidence to the Health Staff that we were there to support them in their time of need as a National Whole-of-Government response. The Health Staff reported that they felt reassured by our ADF presence and were pleasantly surprised by the value that we brought by integrating our campaign planning, operations management and logistics planning skills. This was highlighted when MAJs Kinleyside and Moutrage were invited to the SAHLN end of year business function to celebrate their annual achievements and were publicly acknowledged for the hard work and re-alignment we provided to what is ordinarily a flat structured, consultative organisation into a more adaptable and decisive organisation that had the confidence to lead in a dynamic and unprecedented pandemic.





**Major Arron Kinleyside supporting the SA Health OP COVID ASSIST PPE Team**

## **16 Regiment RAA Support to Joint Task Group 629.4 – Operation COVID ASSIST 19 (Part 2)**

*Major Owain Griffiths*

After helping the local Adelaide hills and Kangaroo Island communities during Operation Bushfire assist, and learning to work remotely during the COVID-19 pandemic, the GBAD Battery received its second operational task for the year. On 12 July 2020, during the height of Victoria's 'second wave' members of 16 Regiment RAA commenced operations in support of the South Australian Police as part of a national effort in responding to the COVID-19 pandemic. After a short RSO&I and some quick planning, the first rotation, headquartered by 111 Battery deployed to the South Australian – Victorian border.



**16 Regiment RAA members prior to departing for Mount Gambier as part of Operation COVID-19 Assist.**

The Battery staged out of Army Reserve Depots in Mt Gambier and Berri. Initially, some detachments were beneficiaries of the generosity of football clubs in Pinnaroo and Bordertown while more enduring

accommodation solutions were being organised. By the end of the Operation, 16 Regiment RAA had supported the South Australian Police border operation for four months over two rotations.

The Battery was given task of supporting South Australian Police check points and roving patrols along the 450 km border. This was a large undertaking for one Battery and the 60 soldiers from 16 Regiment RAA were soon reinforced by an additional 40 personnel from 10/27 Royal South Australian Regiment, and 114 Signal Squadron. As the deployment progressed, the Battery (now Emergency Support Team) was joined by members of the Royal Australian Navy and Royal Australian Air Force.



**Gunner Daniel Smith, SA Police Constable Bret Sellar, Gunner Brent Winen, SA Police Brevet Sergeant Adam Kuchel and Gunner Zac Isemonger at a state border vehicle checkpoint, near Renmark, SA.**

The Joint Task Unit was under the command of HQ 9 Brigade (Joint Task Group 629.4), which has responsibility for ADF support to Operation COVID-19 assist in the South Australian Region. Following Operation Bushfire Assist, the Joint Task Group HQ switched almost immediately to supporting the response to the Corona Virus. This included working with the South Australian Police, South Australian Health, and the Department of Premier and Cabinet, providing planning advice and ADF support at all levels.

At the border, the Joint Task Unit soon set to work integrating with the South Australian Police. The ADF personnel found common ground with the Police Officers, and strong working relationships were easily formed. Typically, soldiers and Police would work 12 hour shifts at border checkpoints, and with police rotations occurring every week or so, it wasn't long before the soldiers were able to

brief in new Police Officers on who all of the ‘regulars’ to the checkpoint were. The task of supporting the South Australian Police was a rare and valuable opportunity for the Joint Task Unit. Many Gunners commented on how much they had learned about the breadth of roles available within the South Australian Police, as well as the similarities and differences between Military and Police training. The ease of integration and working towards a common goal with the South Australian Police was a highlight of the operation.



**Lieutenant Jereme Russell, A Troop Commander 16 Regiment RAA (right), speaks with SA Police Sergeant John Gardner at a state border vehicle checkpoint, Renmark, SA.**

Along the border, Sailors and Soldiers assisted Police including meeting vehicles at the border checkpoints and assisting in the efficient processing of essential travellers into South Australia. Of course, the size of the area of operations, and the number of checkpoints along the border presented both the Police and Joint Task Unit with an interesting logistic challenge. By working together, the supply capability of the Police was integrated with the distribution capabilities of both 9 CSSB and the Joint Task Unit, to ensure that the checkpoints were adequately supplied with food, water, and personal protective equipment (PPE).

Characterised by hired ATCO huts, floodlights, porta-loos and small campfires, Police and Soldiers at some of the border checkpoints believed that their work areas needed a little more flair. At one location, ADF members built a dirt-berm lounge suite, others created putting greens and barbeque areas. One checkpoint featured ‘Wilson,’ a wooden (anti-virus) scarecrow built by local school children (Wilson was, of course, wearing full PPE). Interestingly, as the sites began to develop, supportive locals brought along supplies to help with the creation of the checkpoints. Firewood,

table tennis tables and gazebos were donated by Australians who were keen to show their support for the task, and to demonstrate a sense of community during challenging circumstances.

Apart from manning static checkpoints on the border, by far the most popular task was joining police conducting roving patrols. Integration with the roving patrols has allowed the ADF members to test their adaptability to operate in new ways, and to share tactics, techniques and procedures across both organisations. Through partnering with the roving patrols, Soldiers were able to gain valuable experience, and were able to assist with coordinating responses to vehicles that were attempting to bypass some of the checkpoints.

Perhaps the most profound and heartening thing about operating in regional South Australia, was the amazing, and very humbling level of support that the Joint Task Unit received from communities all across the border. It was not uncommon to hear of coffees, cakes, and other gifts being dropped off by the local community. The opportunity to chat to members of the community who have dropped in to visit the checkpoints, hearing their stories, and the sense of being welcomed into the community certainly went long way towards helping to make a shift go just a little bit faster.



**Gunner Liam France, enjoys the company of farm dog Biscuits at the Kybybolite State Border Checkpoint, SA.**



As the deployment progressed, the Joint Task Unit had the opportunity to join the Police and SA Health in the establishment of a medi-hotel in Mount Gambier. The hotel provided the ability for essential travellers from Victoria to quarantine in a controlled environment prior to entering SA. Working in the medi-hotel was an excellent opportunity to integrate more broadly with other SA government agencies and to learn about the specifics and practical application of infection control measures from SA Health.

After a rotation of personnel, and a hand over to 110 Bty HQ in September, 16 Regiment RAA completed its support to the South Australian Police on the border on the 30 of October, and has moved into a period of maintenance and preparation for the high risk weather season, COVID-19 contingencies, and the 2021 training year.



**Commander of the ADF COVID-19 Taskforce Lieutenant General John Frewen DSC, AM (centre), visited a border control check point in Mt Gambier during his visit to SA. He was hosted by Major Nick Wells.**

## Haydon Shield Military Skills Completion & Honours & Awards

*Warrant Officer One Gavino Mura*

There is no way that any member of 16 REGT RAA could have forecast what 2020 was to bring. Throughout this turbulent and unpredictable year. We saw a bushfire ridden beginning, which progressed into COVID-19. This resulted in the Federal and State Governments call upon 16 Regiment RAA for support in a range of roles. During OPERATION BUSHFIRE ASSIST 20 (OPBA 20) 16 REGT RAA formed the 16 Regiment Emergency Support Force (16 REGT ESF) and OPERATION COVID-19 (OP COVID-19) supporting JTG 1111.11. Members from the unit have been recognised for their efforts and

awarded the following commendations and awards:

*Operation Bushfire Assist 2020 - ADF Silver Commendation:*

- CAPT J Bouzanquet
- LT S Reid
- SGT S Bradley

*Operation Bushfire Assist 2020 - ADF Bronze Commendation:*

- GNR L Harper

In recognising the above four members, it is also important to note that 16 REGT RAA was supplemented with support from the NZDF, RAN, additional Army units and the RAAF. In addition to awards for our members eight additional Army bronze commendations and three Army silver commendations for exemplary service were awarded. As OP COVID-19 has not yet come to a finish, we wait to be advised whether members from the Regiment (nominated for their efforts during this operation) will be awarded for their efforts.

Throughout this year Regiment personnel have often been tasked outside of their normal role. A number of individuals were recognised for their work in support of Regimental Operations, including:

*Australia Day Medallion*

- LCPL K Spence

*Soldiers Medallion for Exemplary Service*

- CPL J Eldridge
- PTE B Roccamante

*ARMY Silver Commendation*

- CPL M Blades

*6 BDE Soldier of the Year*

- LBDR M Woollatt

## Haydon Shield Military Skills Competition

The Regiment was able to get back to basics with the conduct of the Haydon Shield Military Skills Competition, traditionally an infantry minor tactics activity designed to test individuals and sections in all-corp soldier skills whilst furthering some friendly competition between the sub-units. This year's competition embraced 'Good Soldiering and Our Values of Service, Courage, Respect, Integrity and Excellence.





**Members of the RHQ/Air Ground Operations composite section receiving orders for the clearance of an enemy group.**

The 36-hour activity saw the first section from 111 Battery step off at approximately 0430h, on the first of ten activities. A quick kit check followed by cadence BFA and tactical water crossing, saw them commence their combined stores carry and pack-march as the sun rose and the temperature hit the balmy high of 4 to 5 degrees. As the day continued with ethical decision-making activities, the obligatory obstacles course, weapons and navigation stands, we saw 110 and 111 Batteries begin to separate themselves from the pack.

However, in the final stands, we saw what would become the champion section from Combat Service Support Battery take the lead with their efforts in skillsets such as section attacks, TCCC and AACFF.



**Members of the CSS Battery team competing in the final cardio-vascular challenge.**

The outcome of the Haydon Shield would not come as a shock ‘for those in the know’ who had observed this Battery’s lead up training in the previous months. CSS Battery who had always reinforced the themes of ‘people,

preparedness, professional, potential and partnerships’ found themselves victorious when the final event was complete, again demonstrating that a champion team is better than a team of champions.

## **CONROD 1 RBS70 LFX – 24-28 Aug 2020**

*Major Nick Wells*

When 16 Regiment RAA was directed to work from home as a result of the COVID-19 pandemic at the end of March we had just completed a two week work up period to prepare for the first exercise of the year. While this meant that 110 Battery was able to quickly re-orient and support Op COVID-19 Assist (the regiment ended up providing a battery to support JTG 629.4 for over four months), it also meant that for the members of CONROD 1 (the callsign of 110 Battery Headquarters), they were itching to get back to doing GBAD training.

As restrictions across the country began to ease, it became possible to aim for a live-fire, and so with a lot of help from AHQ Air and Missile Defence branch, HQ 6 Bde and HQ FORCOMD, the RBS70 Live Fire Exercise (LFX) was classified as an essential activity to allow the targets and missiles to cross state borders, and CONROD 1 deployed to Woomera on 24 August. By this stage, 16 Regiment RAA had not deployed the GBAD Battery for over 12 months, and so the importance of conducting this exercise was not lost on the members of the Battery.



**Panoramic view of Firing Point 1 and the Protected Mobility Air Defence Variant vehicle at the Woomera Prohibited Area, SA.**

While the terrain of Woomera can be unforgiving, the range gives users immense freedom to try different activities safely but without the usual constraints of Army ranges. This freedom has continually enabled 16 Regiment RAA to develop its TTPs with radars and missiles throughout its history, and CONROD 1 was proud to continue that this year. Using the upgraded G-AMB with Mode V IFF for the first time and the Lightweight Surveillance and Target Acquisition Radar (LSTAR), CONROD 1 was able to work with

RAAF P-8 Poseidon aircraft to detect towed targets as well as both DJI Phantom and Phoenix unmanned targets to cue and engage using the RBS70 missile and other systems.



**111 Battery members test the GIRAFFE Agile Multi-Beam Radar to ensure that it can correctly identify the target.**

With an increased missile allocation of 20, CONROD 1 was able to push not only the technical limits of the radars and C2 systems, but also the procedural methods of target classification and allocation within the Command Post to enable dual engagements; one of many small steps to transform the Regiment towards the NASAMS capability. It also allowed a few select soldiers to fire more than one missile, including one as an 18th Birthday present – happy birthday Gunner Pratt!



**Three members of 110 Battery (and the safety supervisor with the white-armband) acquiring the target at Woomera SA.**

With every engagement digitally cued via the Tactical Command and Control System (TaCCS) and four out of seven targets destroyed, the members of CONROD 1 were proud of their ability to retain their skills despite the challenges that 2020 has thrown at

everyone, as well as continue to develop the capability with a view towards NASAMS. At the completion of our exercise at Woomera, we then conducted a condensed refit-to-fight and deployed to the SA/VIC border two days later to support SAPOL as part of JTG 629.4 for two months, demonstrating impressive flexibility on behalf of the Gunners.

## **Force Modernisation Activities In 2020**

*Lieutenant Colonel Mark Mankowski*

Early in 2020 the NASAMS Familiarisation Environment was installed at Woodside Barracks in the Regimental Training Centre. This is the Air Defence Console software installed on commercially available computers. We have been provided with sufficient terminals to have a networked Battery defence.

During COVID-19, when we were allowed to return to training, we ensured that every Gunner in the unit was introduced to this simulator. We also took the opportunity to try and imagine what it would be like for a Gunner and a Lieutenant to deploy on operations with NASAMS in 2025. This resulted in the ‘Race to Manus’ article that was published in the Bridges Occasional Papers. We subsequently used this scenario in the simulator and demonstrated it to Commander 6 Brigade, Commander Forces Command and the Chief of Army.



**Chief of Army, Lieutenant General Rick Burr, AO, DSC, MVO (second from left), views the Advanced Air Defence Simulator during his visit to Woodside Barracks, SA.**

We have also worked collaboratively with the Air and Missile Defence Branch in AHQ to finalise the Concept of Employment and the Introduction Into Service Directive for NASAMS. The work on these documents has highlighted the incredible potential of NASAMS to support the development of an



Anti-Access Area Denial capability for the ADF to deter adversaries. These concepts were later tested on Exercise VITAL PROSPECT 2020 in September.

Meanwhile the work of Raytheon Australia, Kongsberg Australia and their sub-contractors to fabricate NASAMS continues. Our future Fire Distribution Centres are being manufactured in Mount Barker, a short drive from Woodside Barracks. We took the opportunity to go and visit the company and see the progress.



**(L-R) Standing in front of one of the Fire Distribution Centres: Craig Vanderstelt - Director, Zenith Customs Creations; John Fry, Kongsberg Defence Australia; Lieutenant Colonel Mark Mankowski, CO 16 Regiment RAA; Neil Gibson, Raytheon Australia; Mary Williamson, Daronmont Technologies.**

Finally, the unit has recently completed its unit establishment (UE). We are in a very fortunate position that the unit is growing to support our transformation to NASAMS from 307 to 364. As a result we have a number of extra Gunners in the unit. One option considered at the UE is to potentially use these Gunners to support sensor detachments in the Long-Range Precision Fire or Protected Mobile Fires capability in the future. At the moment 16 Regiment RAA will retain Joint Terminal Attack Control Troop and the Ground Liaison Troop. These could potentially move to 8 Fires Brigade if Army decides to raise that formation.

16 Regiment RAA has demonstrated that we are a part of an Army in Motion. We have demonstrated that we are Ready Now through two domestic operational deployments and the achievement of a GBAD Battery LFX. We have also invested in Future Ready with our teammates in Army Headquarters to transform the unit in preparation for NASAMS.

## School of Artillery

*Lieutenant Colonel Benjamin Gray  
Commanding Officer*

The School of Artillery (SoArty) generated over 5,200 proficiencies and train in-excess of 1,200 students across all course regimes. This includes 250 ab-initio Gunners. Supported by the whole of the RAA, at its peak SoArty executed 14 concurrent distributed courses across five locations, centrally managed from Puckapunyal and incorporating the entire breadth of blended, digital and technical instructional techniques: additional to ab-initio training, doctrine development and technology modernisation.

SoArty's role is to deliver individual training, nested in the Combined Arms environment, in Joint Fires & Effects, Surveillance and Target Acquisition, and Air and Missile Defence in order to build and sustain Australia's best practice in Joint Effects training, education and doctrine. This is to support the generation of the Army's foundation war fighting capabilities through high quality and safe individual training in the Royal Regiment's requisite capabilities.



The key activities and events achieved by SoArty in 2020 included:

- DTR despite COVID, able to coordinate and manage courses across multiple locations with no critical impact to training
- support to OP Bushfire and COVID Assist
- successful testing of the Precision Guidance Kit (PGK)
- first live fire of next generation of the Digital Terminal Control System (DTCS)
- ongoing introduction of Digitally Aided Range Safety – Artillery (DARS-A)



- upgrade to the next version of Advanced Field Artillery Tactical Data System (AFATDS)
- certification of RAA digital safety

---

*... improvements in training (procedures, technology and culture), fostered combat behaviours ,,,*

---

SoArty has pursued the Future Ready Training System and operationalised the Training Transformation by mainstreaming improvements of technology, procedures, and culture across the unit. This has involved a first principles review of all practices, validation / verification of all technology, procedures, and culture, followed by the disciplined adoption of new technology and evolved methods. Instructor energy combined with the impetus of COVID has resulted in digitised learning content across all wings and courses, with a heavy emphasis on blended learning and distributed training (in partnership with contractors) via internal resources, and an evolved instruction approach. Training design was reviewed with a look to create a holistic training environment where combat behaviours, fundamentals and mindset are absorbed and then reinforced as a 2nd and 3rd order consequence of the environment trainees are immersed. This has proven extremely effective.

SoArty was affected by COVID-19 as much as

any unit or TE and was forced to adjust in- stride with each new complication or restriction. SoArty through simple changes and adjustments, all-ranks engagement and pre-emptive measure permitted a transition into a workable methodology as each new friction point presented. Despite the disruption, SoArty has been able to achieve DTR, maintained improvements in training (procedures, technology and culture), fostered combat behaviours, invested in instructional excellence and supported artillery modernisation. Most impressive was the pragmatic, positive and rapid response from junior leadership. Their in- stride adaption, energy, continuous desire to find new and different ways to deliver training has been impressive. Looking forward to 2021, SoArty will continue to pursue a future ready training system, expanded combined arms immersion, and commence preparations for absorption of NASAMS, Long Rang Fires and Protected Mobile Fires into the training system.

The events of 2020 have forced SoArty to embrace training transformation while continuing to maintain excellence in training delivered at all levels. This has only been achievable due to the hard work by all staff who have embraced this change. Their dedication to duty has made SoArty ready now while their innovations and quality of work will ensure that we are future ready for the rapidly changing landscape of the RAA.





“DIRECT FIRE” M777 PAINTING

## PRINTS AVAILABLE FOR SALE

In May 2017 the Australian Artillery Association very generously presented to the Royal Regiment a large oil painting of an M777 and detachment painted by Mr Phillip Pomroy. The original hangs in the Bingham Instructional Block outside the Donkin Theatre at the School of Artillery.

The Regimental Committee elected to produce a run of 200 prints of the painting, with 50 numbered and signed by the artist.

Prints are now available for purchase by individuals, sub units, units, clubs etc. The aim being to raise funds for the Gunners Fund to support such great initiatives as the annual JNCO and GNR of the Year awards.

**NOTE:** THE ONLY DIFFERENCE BETWEEN THE IMAGE ABOVE AND THE HARD-COPY PRINTS IS THAT THE PRINTS HAVE A 4 CM WHITE BORDER FOR FRAMING PURPOSES. THE OVERALL DIMENSIONS OF THE PRINT ARE 68 CM X 41 CM.

## HOW TO PURCHASE “SIGNED” & “UNSIGNED” PRINTS

**Limited Edition Print - 50 copies signed & numbered by the Artist @ \$100 per print.**

**Unsigned Prints are available @ \$35 per print**

**Postage & Handling: \$10**

### Contact

Major Gary Down, SO2 HOR;  
Email: [gary.down@defence.gov.au](mailto:gary.down@defence.gov.au)

TO ORDER: EMAIL MAJOR DOWN & ADVISE THE NUMBER OF PRINT(S) YOU WOULD LIKE TO ORDER (SIGNED / UNSIGNED) AND THE POSTAL ADDRESS FOR THE ORDER TO BE DESPATCHED. MOST IMPORTANTLY IMMEDIATELY TRANSFER THE REQUIRED AMOUNT INTO THE GUNNERS FUND TO ENSURE TIMELY DESPATCH.

*Bank details are:*

*Account Name: RAA Regt Fund  
BSB: 642-170 & Account Number: 100026037*

**NOTE:** INCLUDE M777 AND YOUR NAME AS A “REFERENCE”

# Fire Plan Modification



## CHIEF OF JOINT OPERATIONS

Headquarters Joint Operations Command

BO9926750

**Major General Matthew Pearse, AM**  
Commander Forces Command  
Headquarters Forces Command  
Locked Bag 7005  
Liverpool NSW 1871

*COMD 6 BDE,  
CO 20 REGT*

*WELL DONE TEAM -  
SUPERB OUTCOME.*

*[Signature]*  
12/11/20

*Dear Matt,*

### CONGRATULATIONS TO 20 REGIMENT, RAA

I write to pass on my sincere congratulations to 20 Regiment, RAA on their recent deployment to Bamaga, Far North Queensland on Operation Resolute.

Task Unit 639.2.4 ensured Operation Resolute was supported with enduring ISR over the Torres Strait from May to October 2020. Working with attachments from the 1st Intelligence Battalion, 1st Close Health Battalion, 7th Signals Regiment and 10th Force Support Battalion, in addition to Royal Australian Air Force personnel and civilian contractors, this truly was an integrated and joint effort. Together, they achieved the operational milestone of employing the Shadow 200 TUAS on domestic operations for the first time, accruing over 820 hours of night flying.

Noting the constraints of operating in a COVID-19 environment, I was impressed to hear of their perseverance in achieving the mission and the care taken to ensure the 88 personnel deployed over two rotations remained healthy.

Congratulations again on a successful deployment, and all the best to your team at Forces Command as we approach the end of the year.

*[Signature]*

**Greg Bilton, AO, CSC**  
Lieutenant General  
Chief of Joint Operations

B1-1-J001  
Department of Defence  
PO BOX 7928  
CANBERRA ACT 2610  
(02) 6128 4000, fax (02) 6128 4020

27 October 2020



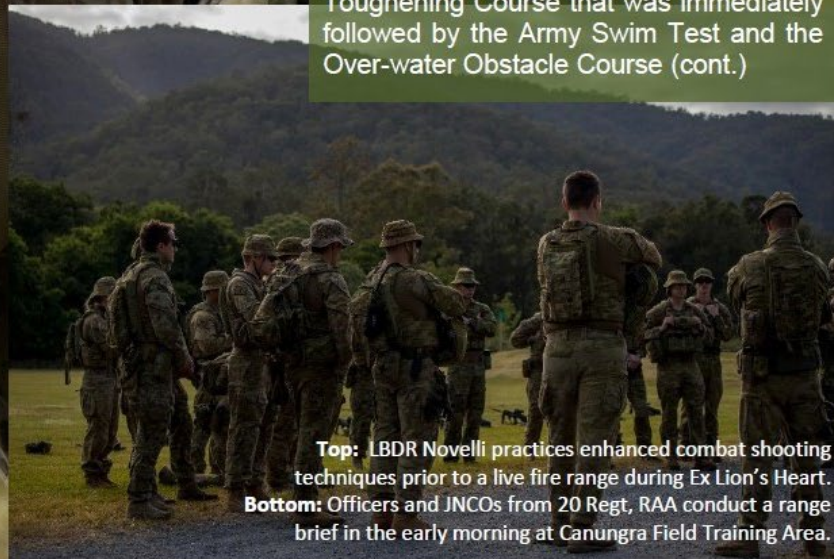
# EXERCISE

From the 06 to 09 Oct 20, the junior leaders of 20 Regt, RAA completed a leadership and resilience activity across both Gallipoli Barracks Enoggera and Kokoda Barracks Canungra. The purpose of the activity was to develop the leadership, teamwork, mental and physical resilience amongst those that expect the same qualities from their soldiers.

The activity comprised three phases with a preliminary phase:

- Preliminary Phase – Confirmation of readiness
- Phase One – Deployment to Canungra
- Phase Two – Conduct of the activity
- Phase Three – Return to unit and post-battle procedure

The preliminary phase commenced with a DP1 inspection to ensure that the Regiment's junior leaders were in fact ready to deploy at short notice. Primary weapons were then zeroed at Gallipoli Barracks 100m Tube Range which was followed by the first of many physical activities over the coming days. The participants completed a Battle PT session with the PTI and CFLs on the Muscle Toughening Course that was immediately followed by the Army Swim Test and the Over-water Obstacle Course (cont.)



**Top:** LBDR Novelli practices enhanced combat shooting techniques prior to a live fire range during Ex Lion's Heart.  
**Bottom:** Officers and JNCOs from 20 Regt, RAA conduct a range brief in the early morning at Canungra Field Training Area.



# LION'S HEART

By Lieutenant Robbie Mooy

The following day saw the commencement of Phase One, with the Regiment's junior leaders deploying from Gallipoli Barracks pre-dawn and headed for the rugged terrain that is Canungra Field Training Area.

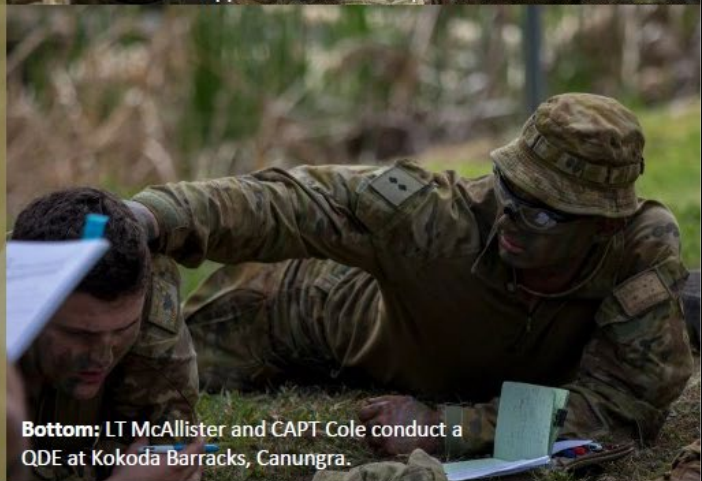
Phase Two commenced with the conduct of a combat shooting range under the guidance of the 20 Regt Senior Range Instructor. The tempo was ramped up from this point on with participants completing additional battle PT sessions, a number of long route marches under load, fighting pit construction, quick decision exercises, the obstacle course and abseiling.

The commencement of Phase Three presented a number of individuals with an opportunity to catch up on some of the sleep they had missed over the preceding days. Once back at the unit the re-fit to fight was completed and all equipment accounted for prior to the release of all participants.

Exercise Lion's Heart 2020 provided the junior leaders of 20 Regt, RAA with a variety of opportunities that are impossible to achieve from behind a computer. The participants were placed under varying degrees of duress and physical discomfort throughout the activity, this provided them with an opportunity to greater understand how they respond physically and emotionally to these situations. All participants developed a greater understanding of their peers and were provided with multiple opportunities in which to utilise a team member's strength to counter another's weakness. This greater highlighted the importance of teamwork and the requirement to be able to depend on one another. In conclusion, all participants are better equipped to lead and have greater self-awareness as a result of having taken part in Exercise Lion's Heart 2020.



Top: (L-R) BDR Entwistle, CPL Budd, LBDR Atanasov and BDR Epps conduct the Gallipoli Barracks Obstacle Course.



Bottom: LT McAllister and CAPT Cole conduct a QDE at Kokoda Barracks, Canungra.





Image: LBDR Kreis, from the 20th Regiment, Royal Australian Artillery, is presented the 6 Bde soldier of the Year by the CAF and RSM-A.

Inset: LBDR Kreis being awarded Forces Command Soldier of the Year and an Army Silver Commendation.

# 6 Bde and Forces Command Soldier of the year: LBDR Lauren Kreis



By Lieutenant Lyndon Harvey

LBDR Kreis, a JNCO from the 20th Regiment, Royal Australian Artillery was awarded the 6 Bde Soldier of the year and Joint Forces Command Soldier of the year for 2020 for her outstanding performance as a Junior Leader and UAS Operator.

LBDR Lauren Kreis joined the Australian Army in 2016, posting to the 20<sup>th</sup> Regiment, Royal Australian Artillery upon completion of her recruit training at 1 RTB and initial employment training at the School of Artillery.

LBDR Kreis became a fully qualified UAS Operator in 2017 and participated in Rifle Company Butterworth Rotation 127 in 2019 before achieving an

Aircraft Captain endorsement and completing her Subject 4 Bombardier course in 2020.

LBDR Kreis was nominated because of her outstanding leadership, communication and performance as a LBDR within 131 Battery.

As a result of being awarded Forces Command Soldier of the Year, LBDR Kreis was awarded an Army Silver Commendation by the Commander Forces Command.

Congratulations LBDR Kreis on your achievements; you are a fine example for all ranks in the Regiment. Good Soldiering.

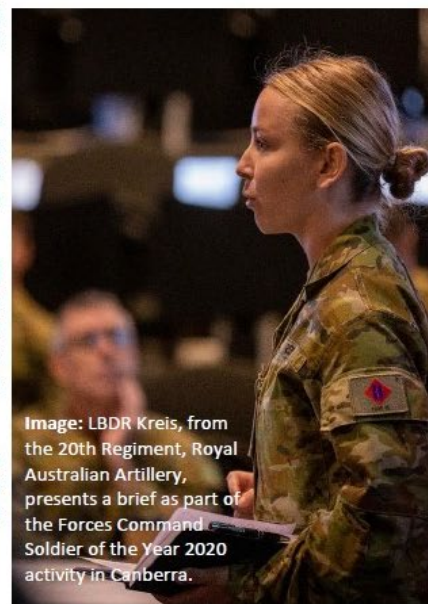


Image: LBDR Kreis, from the 20th Regiment, Royal Australian Artillery, presents a brief as part of the Forces Command Soldier of the Year 2020 activity in Canberra.



# Falcons Soar Over the Torres Strait

**LT Christopher La Rose-Knight (D Troop Commander, 132 Battery) discusses his experience leading an RQ-7B Shadow 200 TUAS Troop in Far North Queensland and the Torres Strait Islands providing strategic regional surveillance effects during Operation RESOLUTE.**



**Image:** An RQ-7B Shadow 200 UAV being recovered after a surveillance mission over the Torres Strait.





In 1942, the 101 Anti-Tank Regiment deployed to Cape York to protect our northern coastline and now, 78 years later, the Royal Australian Artillery has returned to Far North Queensland.

In response to the potential threat of COVID-19 vectors from overseas, 20th Regiment was tasked to deploy its Shadow 200, Tactical Unmanned Aerial System to provide maritime surveillance over the Torres Strait as part of Operation RESOLUTE. This marked two major milestones for the Regiment: deploying the Shadow 200 TUAS on a domestic operation; and conducting missions entirely over water.

As part of Operation RESOLUTE, the Task Unit conducted aerial surveillance within the Torres Strait Islands and along the Far North Queensland Coastline to deter and detect illegal activity in conjunction with Australian Border Force and other ADF task units.

Led by Battery Commander, Major Evangelisti, the deploying force consisted of personnel comprising of two services across eight different corps which included a troop of UAS operators, imagery analysts, cooks, signallers, medics and air traffic controllers from the RAAF.

After departing from Brisbane, the team undertook two weeks quarantine in Townsville prior to travelling via road to 51 Far North Queensland Regiment's Bamaga Depot, the place that would be their home for the next 5 months.

On arrival the Task Unit (designated Task Unit 639.2.4) received a special welcoming ceremony by the local indigenous leaders, beginning a friendly and supportive relationship that lasted throughout our stay. Once set up the team were eager to start flying in support of Maritime Border Command.

The team faced many challenges throughout the duration of the deployment, such as unseasonal persistent overcast weather conditions pushing the operators to better predict incoming weather and find the most efficient and effective ways to utilise the AO. Additionally, with the task unit so far north, it took two (at times four) weeks for any logistic support to reach them, meaning that they were as self-sufficient as possible and had to get it right from the start.

A major highlight from the deployment was the successful achievement of dispersed operations from a forward location at Punsand Bay. This greatly increased Shadow's range, pushing deeper into the AO. The team also successfully conducted spoke operations from Thursday Island which has proven the viability of operations from this location for future deployments.

However, it wasn't all work and no play for the team who also prepared for and conducted a half marathon competition in the blistering Northern Queensland sun.

Overall the mission was a success, with a total of 27 vehicles travelling more than 5,560km and Shadow 200 conducting 820 hours of flight time over 123 sorties from June to October. The Task Unit gained a wealth of invaluable operational experience during the deployment.

During the deployment all members of the Task Unit undoubtedly made a substantial contribution to the National surveillance and security effort in the Torres Strait and Far North Queensland and should be immensely proud of their efforts.

*132 Battery – Sive Aere Sive Acies.*



Image: An RQ-7B Shadow 200 UAV being prepared by its crew for a night launch in FNQ.



# OPERATION RESOLUTE

## 132 BTY ON DOMESTIC OPERATIONS



Background: Personnel from 10639/2.4 establishing the flightline in FNO in June 2020.



## For many military veterans, leaving the force is the biggest battle

**The Conversation -Academic rigour, journalistic flair - March 26, 2021**

*Authors: Karen Becker, Professor of Management, & Dan Abell both University of the Sunshine Coast; & Matt McCormack, Senior lecturer, UNSW*

Since the beginning of the Afghanistan War in 2001, 41 Australian military personnel have been killed in combat, while more than 600 veterans have killed themselves. This week the House of Representatives affirmed a resolution from the Senate calling on the Morrison government to establish a royal commission into the suicide rate among both current and former military personnel. Calling a royal commission would certainly signal this is an issue of national concern, but whether it can achieve what previous inquiries have not is a real question.

Veteran suicides (and associated mental health issues) have been investigated by the Australian Defence Force, Department of Defence and Department of Veteran Affairs, as well as a Senate select committee, Productivity Commission and the Australian Institute of Health and Welfare. Yet the suicide rate among veterans appears to be rising.

The complexity of the problem is hinted at by the big difference between rates for those serving and veterans. As the resolution passed by parliament notes, the rate among serving military is less than half that of the general population, while among veterans it is now nearly double. There are obvious causes, such as the trauma of past battlefield experiences. But there are more nuanced drivers, to do with the very nature of military life, a culture developed over hundreds (indeed thousands) of years to create effective fighting forces, and the difficulties many experience in leaving this life.

### **Anxious, misunderstood, alone**

The challenge of transitioning from military to civilian life is highlighted by our research involving interviews with 31 men and women who had recently left military service. They came from all three services (navy, army, air force). Twenty-five were men, six women. Their ages ranged from 25 to 56, with their length of service ranging from five to 37 years (16 years was the average).

Mental health was not our focus. In fact, we chose subjects without significant physical or psychological impairment due to their service. But almost everyone told us about the culture shock of leaving military life, finding a new job and working in the civilian world. They spoke of feeling anxious and frustrated; of not understanding others' motives and behaviours, and of feeling misunderstood; of struggling to translate their military service to

civilian jobs; of being cut off from their previous support networks; and of feeling, at times, very alone. If this is the experience even of healthy, well-adjusted veterans, it seems hardly surprising those with mental health issues could be pushed to breaking point.

### **It's not just another job**

For those not personally connected to the military or a veteran, it can be easy to underestimate just how different military life is, and how much of a culture shock leaving that life can be. It is not just like changing jobs. Most join the military straight out of school. They enter a highly regimented world where almost every aspect of their life is tightly controlled. Their training is designed to encourage thinking and acting alike. It emphasises values such as loyalty, courage, commitment to the collective good, and discipline. Military effectiveness relies on these attributes.

As the suicide statistics suggest, those who make it through basic training can adapt well to the life. The challenge comes when it is time to leave this culture behind. One of our subjects likened it to "peeling an onion". It starts with losing the uniform and expectations of presentation. But it eventually requires changing some deeply held beliefs, values and behaviours that may not fit in civilian life. They work at a rapid pace, focus on a clear and shared mission, don't stop till the job is done and always put the team first. These are not necessarily things they find in a civilian workplace.

### **Losing comrades**

Making this change is more complex and stressful than most imagine. In the words of one veteran, who served in the navy for five years: "I've had to learn how to wind back, because warship mentality does not work in a civilian workplace."

Many mentioned a sense of a loss of identity – military work wasn't what they did, it was who they were. As another who served in the navy for 26 years, explained: "All your friends are in uniform [...] Something's lost. It's like you're not in the club."

Even participants who found jobs in organisations with explicit programs to support veterans still reported feeling stress and unease as they adapted to civilian work. Five veterans we spoke to mentioned, unprompted, that they knew veterans who had killed themselves and understood how those individuals had reached that point.

So if the struggle is real for those in our study who had made it into employment, imagine what it is like for those who struggle to find work or those have been diagnosed with a mental illness trying to cope with integration into a world that is foreign to them and who are unlikely to easily find a new path into employment. We are not advocating for any particular mechanism to inquire into veteran suicide. But we are adamant there must be an increased focus on the struggle veterans face when transitioning to a civilian world.

# Professional Papers

## Accelerating Land-Based Fires in the Australian Army

*Lieutenant Colonel Benjamin Gray*

The modernisation and capability expansion of the Army's artillery will result in a ubiquitous land-based capacity to blend kinetic multi-domain capabilities into a unified effect. The Australian Defence Force seeks to alleviate the burden on the manoeuvre arm through the convergence of fires and effect across multiple domains. The expansion of long-range lethality announced in the *2020 Defence Strategic Update*, will provide flexibility, responsiveness, and firepower that facilitates combined and joint operations to greater effect. Artillery traditionally completes its role in combination with armour and infantry; although it can and should be used to influence the battlespace via deep engagements and strikes (harmonised with other delivery assets). It operates in all terrains, from sea level to extreme altitudes, ignores adverse weather and can be employed in the most inhospitable of terrains.

The violence created by massed land-based fires transcends the movement and manoeuvre of battalions. Arguments that dismiss its utility are symptomatic of decades of wars of choice, the lack of a tangible threat, and a propensity to seek quick solutions offered by technology or stand-off capabilities; artillery is a fundamental apparatus of war. Unfortunately, many military professionals do not realise, ignore, or have difficulty accepting the efficacy of mass and destruction. Instead, there is a preference for discrete delivery and precision. The reality, however, is that in a high intensity conflict (particularly one of necessity) it is entirely appropriate to problem-solve with high explosives. Precision is seductive and enticing, but it is neither practical nor applicable in all contexts. There is a distinct need to recollect the visceral reality of close combat in a high

intensity industrialised war and reinvigorate fires to meet emergent challenges. To address this problem, the Army plans to endow itself with a credible self-propelled artillery piece compatible with combined arms formation manoeuvre, numerous long-range missile platforms to support both land and maritime operations, and systems to facilitate rapid expeditionary deployment.

### Role and Relationships

Armour and Infantry, the close fighting manoeuvre corps, traditionally share an abiding closeness with the joint fires' community. However, recent years have witnessed changes in thinking in the Australian Defence Force regarding structure and models of use, and a penchant for standoff precision strike over classic manoeuvre supported by fire. This is understandable, but lessons from most recent conflicts indicate that the effectiveness of standoff capability in isolation is not absolute and is heavily context-dependent<sup>1</sup>. Standoff strikes work tactically for counter-insurgency but will not necessarily prove effective in the face of high-tempo, manoeuvre forces paired with massed enablers and directed by an audacious commander. Precision is extremely valuable, but in a future high intensity battlespace, massed violence setting preconditions for success will be equally as critical.

Artillery has proved to be one of the major combat multipliers in history, and in the future its role will be the convergence

of fires and effect across multiple domains<sup>2</sup>. Modern technology by itself did not save the day in Mosul, nor did it do so in the Russo-Ukraine

War, nor in the close fights of Iraq and Syria. Rather, brute force, willpower and attrition did<sup>3</sup>. Advocates of a systems and technical approach to war, continue to overlook that it is ‘a dreadful and impassioned drama’ to which the introduction of new capabilities expand complexity as much as reduce it<sup>4</sup>. At almost every juncture where technical innovation has been declared to make classic capabilities irrelevant, this has been proven wrong<sup>5</sup>. History informs us that the centrality of close fighting manoeuvre corps will remain an enduring aspect of battle<sup>6</sup>. This uneven burden is a persistent reality, and while other services and corps contribute meaningfully and effectively, infantry and armour will continue to shoulder the greatest share of that burden.

Throughout modern military history, leaders and military theorists have observed that mass and the ability to generate it are the key to victory<sup>7</sup>, although where it was numbers, now it is the ability to project and layer effects in a given time and space by whatever means possible. Like its allies, the Australian Defence Force seeks to alleviate by interlinking air, land, sea, space and cyber effects to respond and potentially pre-empt threats and opportunities<sup>8</sup>. Land-based fires exist to facilitate conditions of relative advantage against adversaries. Artillery, when employed correctly permits large battlespace challenges to be reduced into manageable and quantifiable segments. It is conspicuous that the intangible features of contemporary artillery contests are, in the populist view, moving from the idea of ‘dumb’ mass to what is perceived to be smart/intelligent/brilliant solutions. It is critical for future success to achieve firepower asymmetries over our adversaries since rarely are engagements, battles, or wars won without sufficient firepower.

The majority of contemporary pseudo-futurists appear to forget, or have chosen to ignore, the visceral reality of close fighting and the need for persistent mitigation of manoeuvre vulnerabilities. The ‘fog of war’ will persist and the ability to throw volumes of high explosive at problems, whilst inelegant, is extremely effective<sup>9</sup>. Admittedly entirely aspirational, but at the tactical level there should be an aim to yield force dominant enough to either lead to instantaneous capitulation or impose destruction so comprehensive that even if a subsequent engagement is needed, the result is preordained. Fires integration is most effective when intimately complementing or being complement

by a form of manoeuvre to achieve a combined endstate. Furthermore, it is more effective when part of an integrated, and echeloned, joint fires apparatus which includes a number of platforms and capabilities. To some, airpower may seem to have displaced Artillery, but this is only true in the non-contested air paradigm of recent conflicts<sup>10</sup>. Land-based fires are a pertinent capability when facing an adversary that can contest the skies; an enemy of the type Australia hasn't faced in decades<sup>11</sup>. In the future, the Australian Defence Force will need to address this challenge by sudden, extreme bursts of violent action, judiciously integrated across all domains. Success will be measured by the side that can best achieve duration, reach, and sequencing spasms of concentrated, energetic viciousness, and creating temporary and localised periods of superiority.

## Fires Objectives

The obliteration of a component of enemy forces is often a prime objective in close combat engagements, as part of the pre-emption, dislocation or disruption of a higher echelon<sup>12</sup>. Historically, fires engagements have been crucial to realising this aim by diminishing an adversary's capacity by both physical destruction (soldiers and equipment) and the degradation of will and cohesion (morale and unity). In most cases, only after an adversary's will had been shattered does it become conceivable to impose substantial casualties or achieve freedom of action. This is common to most engagements regardless of size and intensity, but comparable effect on enemy will and cohesion depends upon the shock of massed effects and the consequential losses and destruction. When artillery is optimised, then it can be the principal reason for a reasonably comfortable success in the close fight; history is testimony to this.

The Australian Defence Force is allied with nation-states who possess quality massed fires capability, integrated into both conventional combined forces and special operations. There is no reason Australia should not expect competent enemies to likewise calibrate themselves.. As the enthusiasm for cyber, precision, and innovation continues, there is a risk of a degrading self-awareness in regard to basic tactical requirements. This is not advocacy for halting the expansion of cyber capabilities and emerging technology, nor for ceasing the procurement of precision munitions, rather that they should not be at the expense of fundamental capabilities.



What has changed over the past several decades are the capability of army fires, artillery, and rockets vis-a-vis potential adversaries. Today, a qualitative and quantitative capability gap exists with respect to Artillery. In its incursion into eastern Ukraine, the Russian Army demonstrated a sophisticated capability to find, fix and destroy targets with long-range fires and other enhanced strike assets. Allies, friends and regional competitors are expanding their inventory and evolving tactical application of artillery and long-range fires to achieve comparable utility<sup>13</sup>. Australia is doing likewise.

Throughout the Cold War, land formations were prepared to trade artillery and rocket barrages with their foes at unprecedented levels. They did so with a level of confidence that volume and range could be maintained as the battle progressed. But recent insurgencies did not require this level of capability, potentially as the adversary changed from industrially enabled high-tech force to an adaptive insurgent<sup>14</sup>. Possessing undisputed freedom of action in the air, aircraft increasingly became the preferred kinetic solution. However, as the global security environment changes and the Australian Defence Force begins to reconsider near-peer competitors, the degradation of fires systems and tactics represent exploitable vulnerabilities. The ability to deny and degrade airpower through advanced missile systems, electronic warfare and cyber-attacks is expected to become commonplace<sup>15</sup>. The paradigms that have defined much of the recent Australian experience of conflict are changing, and the Australian Defence Force must adapt accordingly<sup>16</sup>. Artillery is a tailorable capability and can still function in Global Positioning System denied and Electronic Warfare degraded environments supported by proven legacy procedures<sup>17</sup>. It is highly likely that the evolution of combat environments will drive Artillery towards an increasingly relevant future. The reputation of Artillery is founded over a number of wars and conflicts by the ‘ability to mass fires and respond with rapid, accurate fires for manoeuvre’<sup>18</sup>. Australia’s principal allies have maintained their massed fires capability (or are rapidly reclaiming them), and are balancing it with development of longer ranges, accuracy, and variety of platforms. Balance and breadth are essential, and in the past Australia chose to gamble on the minimum, accepting a multitude of vulnerabilities. This weakness has been addressed by capability advancements announced in the *2020 Defence Strategic*

*Update*<sup>19</sup>, but realisation of this capability will take a number of years to achieve.

## Future Fires

The employment of fires in the future will be somewhat similar to the past 100 years, which have been characterised by orchestrated and hasty engagements to shape the environment and diminish the adversary, but with a rebalancing of precision and mass. None of this is anything new, but for the Australian Defence Force genuinely to compete in a future high-level conflict its joint fires apparatus will need to possess a balance of guns (towed and self-propelled), rockets, and missiles. This will be complimented by a variety of ammunition and fuses to achieve desired results at the target end. If in a future conflict air support cannot be guaranteed, this will necessitate a robust artillery capability.

Historically, the majority of casualties have been inflicted by artillery<sup>20</sup>. So, while air delivered effects are currently popular, established ground-based systems have an important role in the future, particularly if sustained rates of fire are required. Military organisations must be cautious of becoming enslaved by recent fashions and alluring trends, only to be betrayed when war begins; it is hubris to be so captivated by fashion such that historically proven methods are ignored<sup>21</sup>. The expansion of long-range lethality announced in the *2020 Defence Strategic Update*, will provide flexibility, responsiveness, and firepower that allows combined and joint tasks to be achieved to greater effect<sup>22</sup>. However, there remains a distressing propensity to rely on non-organic fire support assets, such as fixed and rotary wing aircraft. This saturates many levels of tactical leadership, and its genesis can be found in experiences drawn from Iraq and Afghanistan, where non-organic assets were abundant. The indifference towards land-based fires and reliance on non-organic fire support assets is an indicator of a land force that is built, in both intellect and spirit, not for war but for intermittent pockets of conflict, where the luxury of air superiority can be assured. The reality is that the Army cannot rely on air force for fire support, and in a high surface-to-air threat the air forces will be heavily reliant on artillery suppression of air defence<sup>23</sup>. Recent experience has conditioned leaders to assume, and commonly do not contemplate anything but, air support; this dubious reliance is likely prove catastrophic<sup>24</sup>. In recent conflicts air support

response averaged eight minutes. Artillery fires can arrive on target within two to three minutes. The approximate three-minute difference is an eternity in a close fight, even assuming air support is available, which in a near peer contest there is no guarantee<sup>25</sup>. Even now in Iraq and Syria ‘artillery units can often provide support much faster than calling for close air support, especially if no aircraft are already on station over the target area’<sup>26</sup>. In a near peer competitive setting, or even in one where an enemy has a measure of air-to-air or surface-to-air capability, the Army must provide for itself. The Air Force will be appropriately dedicated to missions to gain/maintain air superiority. There is a distinct need to relearn the importance of accurate, timely, and all-weather fire support to joint and combined arms operations; as it remains a capability that airpower or other means cannot replicate.

### Reinvigoration of Massed Fires

In the future Artillery will contribute to high-intensity operations by providing flexible, persistent, and instantaneous effects. Technology developments have led to increased flexibility, responsiveness, and significantly more accuracy. It's possible to concentrate land-based fires of such density and lethality to achieve disruption of advancing armoured formations in a matter of minutes, massed engagements in the Ukraine are demonstrative of this<sup>27</sup>. For some, this factor has yet to genuinely sink in: that in a modern high intensity conflict the norm is mechanised and armoured units being regularly disrupted/dislocated by fires, and Australia cannot absorb cumulative destruction of this nature. Napoleon himself stated that ‘good infantry is without doubt the sinews of an army; but if it has to fight a long time against very superior artillery, it will become demoralized and will be destroyed’<sup>28</sup>. Though from another era his observation remains relevant, the threat needs to be taken seriously, as Australia cannot afford to sacrifice Battle Groups with any frequency.

Compared to costly platforms and capabilities, Artillery (Howitzer and Rocket) present a reasonably inexpensive means of delivering kinetic effects. Depending on airframe, ordnance, distance, etc...airstrikes vary between eight to ten times as expensive<sup>29</sup>. Main Battle Tanks, such as the M1A1 Abrams, normally come in around 3-4 times as expensive, but also include the likely additional cost of the lives of

crew<sup>30</sup>, and field gunners are 50% cheaper to train<sup>31</sup>. Arguably, aircraft possess higher (though fleeting) tactical flexibility and a range advantage, but artillery provides a practical assurance and durability aircraft will not match. Artillery is inherently linked to manoeuvre units, is significantly more responsive and unrestricted in adverse weather, and with the introduction of Protected Mobile Fires are likely more survivable than fast or rotary air against a near peer adversary.

Importantly, in-service and emergent ammunition performs admirably and are cheaper than air-delivered equivalents (when piloting, aircraft maintenance, hours and fuel are considered). Furthermore, ammunition that will imminently be introduced to service can achieve an effect against armoured or mechanised formations air cannot replicate with a comparable effort<sup>32</sup>. Most importantly, unlike aircraft, Artillery can perform continuous fire missions to support own troops. None of these points should be taken as promoting the thinning or replacing of air capacity. However airpower continues to exude a mystique and is an ‘unusually seductive form of military strength, in part because, like all modern courtship, it appears to offer gratification without commitment’<sup>33</sup>. Air power is a powerful tool of war, however it does not dominate the battlefield in a peer threat environment and impressions of the last 40 years of conflict are largely exaggerated and misunderstood<sup>34</sup>. Technical enthusiasts delight in comparing one system against another, but one on one platform fights are a rarity. Any comparison should consider an aggregate of the systems of one side versus the aggregate the other<sup>35</sup>. When the example of the past is ignored, it is simple to fall into technological determinism, and an obstructive ‘modern scientific pacifism that tries to prove that bloody war is unnatural and has no utility in solving conflicts’, denying the potential reappearance of major battle<sup>36</sup>. Airpower cannot be everywhere at once and needs to be appropriately balanced against a system that can be linked heart and soul to the ground manoeuvre force in all terrains, weather, and contexts.

The focus on technical alternatives and non-traditional mission profiles in recent conflicts is what led to the atrophy of conventional field artillery. For some, the attitude today appears to be one where it is perceived as an accessory rather than an essential arm; once again indicative of an organisation that assumes away

problems, and has spent too long away from a real fight. The commendable disapproval of war, shared by many Westerners, is in many ways a manifestation of a post-military society, replaced by humanitarian intervention, limited war, precision, and the complete avoidance of misery in battle (as if that is actually achievable). Artillery tends to lose significance in the minds of those most reliant upon it through times of peace<sup>37</sup>. The absence of an existential threat means that peacetime norms have appropriated the right to critique the past and select future structure and capability.

The joint fires operating environment will continue to evolve, and it would be sensible to anticipate an ever-increasing obsession with range, lethality and a reinvigorated desire for mass. In conjunction with this, the contemporary examples of Syria, Iraq, and Ukraine allude to a much more unstable and distributed battlespace<sup>38</sup>. This will mandate very different approaches to tactics, operations, and a return to the frequent and substantial use of fires to create opportunity and shield vulnerability<sup>39</sup>. In a future where it is likely that adversaries will wield comparable or greater capability, it would be practical to let go of the preoccupation with precision and discrete effects that proved effective against motivated agrarian fighters<sup>40</sup>. Aggression, mass, speed of decision, and the will to apply devastating force will be essential and the investment in Long Rang Fires<sup>41</sup>, Protected Mobile Fires<sup>42</sup>, and improvement to in service platforms provides a much larger family of capabilities<sup>43</sup>. The three established Gun Regiments, and a handful of 81mm mortar platoons, are an insufficient land-based fires apparatus, the incoming investment represents a true expansion of capabilities and tactical/operational options<sup>44</sup>. Considering the potentialities of the current and future battlespace, the Army is evolving into an integrated and layered massed fires system to enable manoeuvre in the close fight and negate potential adversary formations in the deep; the strengthening of 'long-range lethality' will achieve this<sup>45</sup>. There is also potential the foundation upon which the Army has previously based cannon numbers is still very much of a paradigm no longer pertinent. Formerly, the rule was that one battalion should be supported by at least one battery of guns, plus the numerous batteries supporting the division or corps. However, in post-World War II evolutions and developments the Australian Defence Forces chose to accept risk with the absolute minimum

numbers of guns to support manoeuvre units, one battery per infantry battalion and no fire units held at Division (degrading over a number of years for a variety of reasons). The paradigm of one battery per battalion has expired, the coefficient has changed in modern conflict, numbers of infantryman matter less than the enablers supporting them at the point of friction with the enemy, and there are few persistent capabilities that can consistently provide that extra touch of violence required<sup>46</sup>. The phased plan to improve current capabilities and adopt a complimentary assortment of artillery, rocket and missile systems is practical when in view of the emergent strategic environment. Robust infantry and armour will always matter, but without the support of a layered and harmonised fires apparatus they may prove to be a 'one-handed puncher'<sup>47</sup>, the new fires capabilities will serve to mitigate this risk. Adapting in stride in the battlespace, it 'is quicker to concentrate fire...than mass forces, this improves flexibility and leads to surprising the enemy and economised of effort'<sup>48</sup>. Ultimately, in war the burden inescapably falls to infantry and armour, so Artillery must endure to enable their success.

The introduction of self-propelled artillery, numerous long-range missile platforms to support both land and maritime operations, and systems to facilitate rapid expeditionary deployment will produce a true echeloned fires system complimentary to capabilities provided by the Royal Australian Air Force and the Royal Australian Navy. Presently, the number of delivery systems do not present an appropriate range of options to provide credible support to manoeuvre arms in a close fight, nor options for the Government of Australia when it comes to operating against a near-peer adversary. In the future Australia will possess a range of options and fires systems<sup>49</sup>. A modest formation manoeuvring in the littoral of the near region that can effectively operate in multiple domains and employ long-range fires could have enormous influence on the Area-Access/Area-Denial umbrella and the multi-domain fight. The most important consideration should be always how to expend a small army for the purpose of war, so as to reduce the initial sacrifice of irreplaceable manoeuvre forces – the contribution of land-based massed fires can prove decisive in preserving force and enabling decisive action.

The modernisation of Army's artillery will result in a ubiquitous land-based capacity to blend



kinetic multi-domain capabilities into a unified effect. However, while it will be able to contribute to the evolving concepts of multi-domain manoeuvre, Artillery also remains the solution to the problems of battle that infantry and armour cannot solve themselves without significant loss of life and equipment; engagements to break through a defended front, plugging gaps created by overwhelmed or withdrawing forces, the denial or retention of fortifications and terrain, and the setting of preconditions prior to an attack<sup>50</sup>. A lesson of war is that ‘firepower provides freedom of manoeuvre in combat, and no air force or combat arm provides that firepower better than the artillery’<sup>51</sup>. To be very clear, airpower is not irrelevant and massed fires cannot solve all problems, but there is an imbalanced understanding of utility that needs to be corrected by a prudent reassessment of capabilities and roles.

## Conclusion

The Army should anticipate facing experienced and capable adversaries equipped with the latest weapons technology, and this includes an array of destructive land-based delivery systems. Whilst the Australian Defence Force is coming to understand how best to embrace a multitude of emergent capabilities, land-based fires remain an enduring requirement should the Australian Defence Force desire to be a credible warfighting entity. In the future, it intends to close the gaps in warfighting capability it previously accepted in the ‘wars of choice’ of the past twenty years. Though the future remains uncertain, and the modern battlespace is a lethal environment populated by highly advanced combat platforms, adversaries possessing the means for both mass and precision, and the will to use it. The Army is increasing its land-based fires apparatus in order to ensure that that when facing a capable adversary, it can match their ability to generate mass at the point of friction, preserve life and enable freedom of action.

---

<sup>1</sup> Knight, R. Case Study in Failure: The Iraqi Air Campaign 1991, GS-13, Central Intelligence Agency, 1992; Clodfelter, M. ‘The Limit of Air Power or the limits of strategy’, *Joint Forces Quarterly*, 78, 3rd quarter 2015, 111-124; Byman, D. and Waxman, ‘Kosovo and the Great Air Power Debate’, *International Security*, Vol. 24, No. 4, Spring, 2000, 5-38.

<sup>2</sup> Johnson, D and Halverson, D, ‘Masses Fires, Not Organic Formations – The Case for Returning Artillery Battalions to the DivArty’, Spotlight 20-1, April 2020, *Association of the US Army*, 1; Horn, J, ‘Cannon Artillery in Future Large Scale Urban Combat’, *US Artillery Association*, posted on 04 May 2020.

<sup>3</sup> Fox, A, ‘The Mosul Study Group and the Lessons of the Battle of Mosul’, *Land Warfare Paper 130-*, Feb 2020, The Association of the US Army, 2-6; Gordon, J, Mikolic-Torreira, I, Sean Barnett, D, Ley Best, K, Boston, S, Madden, D, Tarraf, D, and Willcox, J, *Army Fires Capabilities for 2025 and Beyond*, RAND, 2019; and Angevine, R, Warden, K, Keller, R, and Frye, C, *Learning Lessons from the Ukraine Conflict*, Institute for Defence Analysis, 2019; Dastrup, B, *Artillery Strong: Modernizing the Artillery for the 21st Century*, Combat Studies Institute, Army University Press, 2018, 5.

<sup>4</sup> Foch, *The Principles of War*, Chapman & Hall, 1918, 5; Eccles, H, *Military Concepts and Philosophy*, Rutgers University Press, 1965, 203.

<sup>5</sup> Toveri, P and Välivehmas, H. *Future Operational-Tactical Warfare*, Helsinki, National Defence College, 2000, 20-21; Becker, J. ‘Contexts of Future Conflict and War’, *Joint Forces Quarterly*, 74, 3rd Quarter, 2014, 16; Voros, J. ‘A Primer on Futures Studies’, *Foresight Bulletin*, No 6, Swinburne University of Technology, 2001.

<sup>6</sup> Macgregor, D. ‘Future Battle: The Merging Levels of War’, *Parameters*, Winter 1992-93, 10.

<sup>7</sup> Carl von Clausewitz, *On War*, ed. Michael Howard and Peter Paret (Princeton, NJ: Princeton University Press, 1984), 194.

<sup>8</sup> Hitchens, T and Freedberg, S, ‘Milley Assigns Service Roles In All-Domain Ops Concept’, *Breaking Defence*, 22 Jul 20.

<sup>9</sup> Elward, S. *The Fog of War*, Joint Military Operations Department Naval War College, 2010, 4.

<sup>10</sup> Evans, M, ‘Forking Paths: War After Afghanistan’, *Parameters*, 44(1) Spring 2014, 89.

<sup>11</sup> *Tactical Responses to Concentrated Artillery*, Report 13, U.S. Army Command and General Staff College, Combat Studies Institute, Fort Leavenworth, 1989, 11.

<sup>12</sup> Leonhard, Robert R. *The Art Of Maneuver*. 1st ed. Novato, Calif.: Presidio Press, 1991.

<sup>13</sup> Watling, J, *The Future of Fires Maximising the UK’s Tactical and Operational Firepower*, RUSI Occasional Paper, Royal United Services Institute for Defence and Security Studies, Nov 2019, 43.

<sup>14</sup> *Future Land Warfare Report 2014*, Department of Defence, Canberra, 2014; Johnson, D, Moroney, J, Markel, R, Smallman, L and Spirtas, M. *Preparing and Training for the Full Spectrum of Military Challenges*, RAND National Defense Research Institute, 2009, xiii-xvii.

<sup>15</sup> Langford, I. 'Australia's Offset and A2/AD Strategies', *Parameters*, 47(1), Spring 2017, 95-98.

<sup>16</sup> Fuller, J.F.C. *The Conduct of War 1789–1961*, Eyre and Spottiswoode, London, 1962, 13.

<sup>17</sup> Toveri, P and Väilvehmas, H. *Future Operational-Tactical Warfare*, Helsinki, National Defence College, 2000, 13.

<sup>18</sup> Durham, G. 'Who Says Dumb Artillery Rounds Can't Kill Armor?', *Artillery*, November-December 2002, 11.

<sup>19</sup> *Defence Strategic Update 2020*, Department of Defence, Commonwealth of Australia, 01 Jul 20, 39.

<sup>20</sup> Schoenfeld, A and Belmont, P. 'Traumatic Combat Injuries', *Musculoskeletal Injuries in the Military*, Springer Science+Business Media New York 2016; A Profile of Combat Injury, *The Journal of Trauma, Injury, Infection, and Critical Care*, Volume 54, Number 5, May Supplement, 2003; LWD 3-4-1, *Employment of Artillery*, 2009.

<sup>21</sup> Macgregor, D. 'Future Battle: The Merging Levels of War', *Parameters*, Winter 1992-93, 13; Toveri, P and Väilvehmas, H. *Future Operational-Tactical Warfare*, Helsinki, National Defence College, 2000, 16; Voros, J. 'A Primer on Futures Studies', *Foresight Bulletin*, No 6, Swinburne University of Technology, 2001; Johnson, R. 'The Changing Character of War', *The RUSI Journal*, 162:1, 6-12, DOI: 10.1080/03071847.2017.1301489, 2017, 6-7.

<sup>22</sup> *Defence Strategic Update 2020*, Department of Defence, Commonwealth of Australia, 01 Jul 20, 39.

<sup>23</sup> Trevithick, J. 'Marines "Burned Out" Two Howitzer Barrels During the Raqqa Offensive', *The Warzone*, 03 Nov 2017; Pietrucha, M, 'The Myth of High-Threat Close Air Support', *War on the Rocks*, 30 Jun 2016.

<sup>24</sup> Boothe, L. 'King No More', *Military Review*, May-June 2013, 74.

<sup>25</sup> *Ibid*, 74-77.

<sup>26</sup> Snow, S. 'These Marines in Syria fired more artillery than any battalion since Vietnam', *Marine Corps Times*, 06 Feb 2018; Trevithick, J. 'Marines "Burned Out" Two Howitzer Barrels During the Raqqa Offensive', *The Warzone*, 03 Nov 2017

<sup>27</sup> Karber, P. 'On Ukraine and the Russian Way of War', *Modern War Institute*, West Point, Video, 26 April 2016; Beehner, L, Collins, L, Ferenzi, S, Person, R, and Brantly A, *Analysing the Russian Way of War Evidence from the 2008 Conflict with Georgia*, Modern War Institute, West Point, 2018.

<sup>28</sup> Phillips, T (Ed.), *Roots of Strategy: The 5 Greatest Military Classics of All Time*, Stackpole Books, 1985, 435.

<sup>29</sup> Joint Strike Fighter — Introduction into Service and Sustainment Planning, Report Number 4 of 2018-2019, Australian National Audit Office, 5 December 2018.

<sup>30</sup> Karber, P. 'On Ukraine And the Russian Way of War', *Modern War Institute*, West Point, Video, 26 April 2016; Kim, M. 'The Uncertain Role of the

Tank in Modern War, *The Land Warfare Papers*, No. 10, The Institute of Land Warfare, Association of The United States Army, June, 2016; Gott, K. *Breaking the Mold: Tanks in the Cities*, Combat Studies Institute Press Fort Leavenworth, 2006, 63-65, 104-111.

<sup>31</sup> School of Artillery review of individual training cost (conducted September 2020)

<sup>32</sup> 155mm SMArt - <https://www.gd-ots.com/munitions/artillery/155mm-smart/>; Bofors 155mm BONUS Munition - <https://www.baesystems.com/en/product/155-bonus> ; Excalibur Extended Range Projective <https://www.raytheon.com/capabilities/products/excalibur>; Assegai - <https://www.defence.nioa.com.au/supply/view/1/3/supply/large-calibre-product/155mm-artillery-ammunition>

<sup>33</sup> Cohen, E.A. 'The Mystique of US Airpower', *Foreign Affairs*, No. 73, Jan-Feb 1994, 109.

<sup>34</sup> Press, D.G. 'The Myth of Air Power in the Persian Gulf War and the Future of Warfare', *International Security*, Vol 26, No. 2, 2001, 44; Boothe, L. 'King No More', *Military Review*, May-June 2013, 7-73; Macgregor, D. 'Future Battle: The Merging Levels of War', *Parameters*, Winter 1992-93, 15.

<sup>35</sup> Grau, L, 'Russian Deep Operational Manoeuvre', *Infantry*, April-June 2017, 26.

<sup>36</sup> Hanson, V.D. *The Father of Us All*, Bloomsbury Press, 2010, 119.

<sup>37</sup> Hanson, V.D. *The Father of Us All*, Bloomsbury Press, 2010, 12.

<sup>38</sup> *Accelerated Warfare*, Australian Army Department of Defence, Commonwealth of Australia, 2019

<sup>39</sup> DeGroat, A. and Nilsen, D. 'Information and Combat Power on the Force XXI Battlefield', *Military Review*, November-December 1995, 60-61.

<sup>40</sup> DeGroat, A. and Nilsen, D. 'Information and Combat Power on the Force XXI Battlefield', *Military Review*, November-December 1995, 61.

<sup>41</sup> Long Range Fires (LAND 8113): A tactical and operational missile system that provides Army a game-changing joint strike capability that is interoperable and complementary to security partner capabilities, deters and coerces adversaries during competition, and will complement RAAF and RAN anti-access and area-denial effects in conflict.

<sup>42</sup> Protected Mobile Fires (LAND 8116): A key enabler for Army's protected manoeuvre system that will intimately support the Combat Reconnaissance Vehicles, Infantry Fighting Vehicles and Main Battle Tanks via defeating threats and enhancing manoeuvre.

<sup>43</sup> *Defence Strategic Update 2020*, Department of Defence, Commonwealth of Australia, 01 Jul 20; *2020 Force Structure Plan*, Department of Defence, Commonwealth of Australia, 01 Jul 20.

<sup>44</sup> Graham, E. 'Australia's serious strategic update', *International Institute for Strategic Studies*, 03 Jul 20; Panda, A, Australia's 2020 Defense Strategic

Update and Force Structure Plan: A Paradigm Shift, *The Diplomat*, 07 Jul 20.

<sup>45</sup> Panda, A, Australia's 2020 Defense Strategic Update and Force Structure Plan: A Paradigm Shift, *The Diplomat*, 07 Jul 20.

<sup>46</sup> Fuller, J.F.C. *Foundations of the Science of War*, Camelot Press, London, 1926, 265; Toveri, P and Välikehmas, H. *Future Operational-Tactical Warfare*, Helsinki, National Defence College, 2000, 23.

<sup>47</sup> MAJGEN George S. Patton Jr. Address to the 2nd Armoured Division Fort Benning, Georgia, 08 Jul 1941.

<sup>48</sup> Smith, Rupert, 'Fighting Instructions', *British Army Review*, Number 149, Summer 2010.

<sup>49</sup> Babbage, R, Titheridge, A and Waters, G. 'Firepower to Win: Australian Defence Force Joint Fires In 2020', *Kokoda Paper No. 5*, October 2007, 30.

<sup>50</sup> Bellamy, C, *The Future of Land Warfare*, St Martin's Press, 1987, 26.

<sup>51</sup> Boothe, L. 'King No More', *Military Review*, May-June 2013, 72.

### Author

LIEUTENANT COLONEL BENNY GRAY IS THE COMMAND OFFICER AND CHIEF INSTRUCTOR OF THE SCHOOL OF ARTILLERY, COMBINED ARMS TRAINING CENTRE. HE IS A GRADUATE OF THE AUSTRALIA DEFENCE FORCE ACADEMY, THE ROYAL MILITARY COLLEGE – DUNTRON, AND THE AUSTRALIA COMMAND AND STAFF COLLEGE. HE HAS SERVED IN A RANGE OF OPERATIONS AND TRAINING APPOINTMENTS WITHIN THE AUSTRALIAN ARMY, INCLUDING OVERSEAS SERVICE IN THE SOLOMON ISLANDS, AFGHANISTAN AND SOUTH SUDAN. HE HOLDS A BACHELOR OF ARTS AND A MASTERS OF STRATEGY AND SECURITY FROM THE UNIVERSITY OF NEW SOUTH WALES, AND A MASTER OF MILITARY AND DEFENCE STUDIES FROM THE AUSTRALIAN NATIONAL UNIVERSITY.



## NOTICE

### 2020 BRIDGES PAPERS 2020

I VERY PLEASED TO ANNOUNCE THAT THE BRIDGES PAPERS 2020 | FUTURE ARTILLERY AND JOINT EFFECTS HAS NOW BEEN PUBLISHED ON THE COVE.

EXTREMELY SOLID EFFORT FROM ALL CONTRIBUTORS AND INDICATIVE OF THE HIGH QUALITY JUNIOR LEADERSHIP OF THE RAA.

LINK:

[HTTPS://OVE.ARMY.GOV.AU/ARTICLE/BRIDGES-PAPERS-2020-FUTURE-ARTILLERY-AND-JOINT-EFFECTS](https://ove.army.gov.au/article/bridges-papers-2020-future-artillery-and-joint-effects)

REGARDS *BENNY GRAY*

BENJAMIN GRAY

LIEUTENANT COLONEL

COMMANDING OFFICER - SCHOOL OF ARTILLERY

DEPUTY HEAD OF REGIMENT – RAA





# Providing more merit to Organisational merit:

## An examination into the RAA's application of change management theory

Major Nicholas Clarke  
Battery Commander, 109 Battery

*"He who has a why to live  
can bear almost any how"*

*Friedrich Nietzsche<sup>1</sup>*

### Introduction

The RAA has limited time to prepare our personnel for the major changes involved with the introduction of new capabilities. Generally, a project that is undertaken for the introduction into service of new capabilities is done so over an extended period of time, thereby allowing organisations to adapt to the change in a slow and deliberate manner. However, with the acceleration of the RAA's capabilities, it is necessary to implement a more dynamic management of many of the Fundamental Inputs to Capability (FIC). The RAA's leaders and managers are integral, key factors influencing the majority FIC for introducing the new capabilities into service. In order to develop future leaders, an examination of how the concept of 'organisational merit' application is applied so that the RAA and Army selects the right individual, for the right position, at the right time.

To enable a rapid change in the RAA, the adoption of civilian change management theory is required. This will encourage early adoption of desired outcomes and increase participation in the change. To illustrate this point LAND 8113 Long Range Fires (LRF) and LAND 8116 Protected Mobile Fires (PMF) will be examined. These projects require the most immediate attention given the revolutionary nature of the capability and limited timeframe for implementation. Air and Missile Defence Systems and Unmanned Aerial Vehicle projects could apply the same principle, however due to the reduced number of stakeholders and a more traditional timeline, the need for immediate attention has been omitted to provide more focus to the paper.

### Army's change management

FIC is an excellent concept that facilitates the departmentalisation of project management into actual organisational change. However, due to the structure of the higher headquarters, the 'Personnel considerations' is spread across a number of critical stakeholders. Therefore, as FIC is considered as part of the larger system, a common shortfall is to focus on a total generic workforce without the consideration of individual motivation, acceptance of the change or potential strength of individuals.

Ideally, DG Systems and Integration branch should develop the CONEMP for the project along with the proposal for the total workforce estimate. DG Army Personnel Capability then develops the estimate into a workforce model that manages development and allocates positions for growth or restructure. In turn, DG Career Management – Army (CM-A) is able to project and manage the current workforce towards the change requirement through preparation and education. While this is a simplistic summary of a process that includes extensive research and stakeholder engagement, the abbreviated timeline for PMF and LRF has meant that the process has reduced the opportunity for developing the individual.

---

***... so that the RAA and Army selects  
the right individual, for the right  
position, at the right time.***

---

John Kotter, a leading organisational change theorist, emphasises the requirement for vision, leadership, creating a sense of urgency and communication vertically and laterally.<sup>2</sup> However, Kotter's theory was developed for a civilian organisation which, generally has more stability in key personnel roles than the military equivalent. However, this provides the RAA with an opportunity to employ individuals at the precise time that they are most effective. For example, technically minded individuals are important during the equipment focused phase of initial implementation, though as the focus

changes from introduction to full operational capability a strong charismatic leader would be ideal for the development of the team. In response, the RAA must apply the similar requirement as a civilian enterprise, whilst implementing additional future proofing strategies. By investing early, the RAA could enhance the enfranchisement of the organisation. However, if this is not achieved, the change could have negative impacts including issues such as perpetuating existing cultural rifts; creating doubt in leadership; missing desired end states; or creating counter political groups.<sup>3</sup>

The Head of Regiment's communication to the RAA community does ensure that his vision for force modernisation is expressed to the desired audience.<sup>4</sup> However, the change behoves the organisation to ensure the effect is achieved in spite of seeming limitations. Therefore, all managers and commanders are responsible for creating a conducive culture and support intermediate goals through analysis, encouragement of innovation and achievement of short-term objectives.

---

*... there are different types of leadership styles and each has their ideal applicability to an organisation*

---

...

Presently, CM-A applies organisational merit to an individual as the proposed means of ensuring objectivity to a person's experiential worth. However, without the process from Systems and Integration to provide the direction to desired outcome, the career management of a prospective future leader is potentially ad hoc. As an example, under the current context it is potentially only fortuitous rather than selected for an individual to be nominated for highly-desirable international engagement. Furthermore, the additional opportunities, such as new positions abroad, are not necessarily available for the career manager to enable the desired development and the individual's experience. The RAA, as the most invested stakeholder of the outcome, has both the opportunity and imperative to inform the process and manage the immediate shortfall.

Previously, the RAA has raised the developmental need for its future leaders as an issue within the quarterly Joint Fires Working Group. However, at the time of writing, there was no evidence that the proposals discussed for 'personnel considerations' had been implemented.<sup>5</sup>

## **Proposal for the RAA's management of key roles**

The RAA has four to five years to prepare its current trained force for the initial delivery of LRF and PMF. The obvious requirement for development should focus on key command positions such as CO, RSM, BC and BSM. As described by Gen. McChrystal, developing organisations or teams that require adaptation need highly creative thinkers early and within key leadership positions.<sup>6</sup> Therefore, the RAA should be seeking individuals that are decidedly critical but have attributes of emotional intelligence to develop team structures rather than focus on a standard hierarchical structure. However, the RAA faces a dilemma within the next four years. To meet the requirement for the future positions a development plan of the current workforce is necessary, though the current feeder ranks hold a significant liability gap.<sup>7</sup> As an example, a prospective person cannot just be posted to a research and development position with the expectation that they will develop their command and leadership skills. Therefore, the requirement to develop individuals for the possible future role needs to be measured against: risk of over-specialisation; impact on Corps/ all corps positions; and the natural attrition of personnel through separation, injury or other means.

The RAA has the capacity to shape the career of selected individuals over the next two posting cycles to maximise their ability to assume critical roles within both the LRF or PMF units. Martlew and other behavioural theorist propose that there are different types of leadership styles and each has their ideal applicability to an organisation throughout a standard development cycle.<sup>8</sup> Table 1 shows how characteristics and attributes are applicable to typical civilian roles and their consequential negative qualities.<sup>9</sup> By extension, the RAA could apply theoretical models such as Table 1 or develop their own leadership traits model for the selection process.

To aid in determining an individual's characteristics, processes such as personality and aptitude tests can also aid in identifying prospective candidates, much like the ones offered by companies such as With You With Me. These resources should only be used as supporting criteria as tests do have their limitations, such as: the subject attempting to influence the results through managing answers, the influence of a subject's current circumstances or mood, and the need for

	Strengths	Weakness	Opportunities	Threat Response Behaviour
Salesperson	Communicative Empathic Confident Relationship-builder Charismatic	Superficial Soft Arrogant Manic Gregarious Unrealistic	Assertive Focus Humility Profundity Depth	Aggressive Changeable Uncommunicative Depressive Quiet
Banker	Assertive Decisive Realistic Stable Strong	Forceful Compulsive Unimaginative Stubborn Miserliness	Empathy Creativity Flexibility Compassion Generosity	Unrealistic Impulsive Indecisive Defeatist
Chairman	Supportive Flexible Visionary Coalition-builder Cooperative	Indecisive Ineffective Manipulative Inefficient Scheming	Realism Decisiveness Effectiveness Letting go	Aggressive Inflexible Dictatorial Defeatist
Professional	Determined Intelligent Self-reliant Thoughtful	Professional Stubborn Loner Perfectionism Academic	Flexibility Team-playing Realism Pragmatism	Passive Political Hard-nosed Tough

**Table 1 – Leadership style attributes<sup>10</sup>**

interpretation by a qualified behavioural psychologist. Therefore, with the supporting materials, RAA commanders could convene a process similar to a Personnel Advisory Committee (PAC) at the Joint Fires Working Groups. Thereby allowing for the identification of individuals with desirable attributes that the RAA believes is ideal for future development towards a key position.

Upon the shortlisting of potential candidates for force modernisation positions, the RAA can select methods to develop the individual for

those positions. Table 2 proposes an inexhaustive example of the position, the desired cohort and the development opportunities once a candidate is selected for a potential future position. Alternatively, if the RAA were unwilling to specifically identify individuals through a selection process, the publication of information such as Table 2 would empower individuals to take control of their own opportunities and development. Providing numerous opportunities to meet the end state allowing the RAA to mitigate the risk of an individual over-specialising or over investing in one candidate.



Either of the two options allow the individual to have franchise of the organisational change whilst they can continue on a standard career progression. For example, a junior Regt OPSWO may have funding from L8116 to observe a critical portion of the manufacturing process and participate in a US Army Course, before posting to a PMF Bty as the BSM. It is

important that this junior WO2's career is not disadvantaged for the opportunities. Rather, his progression pathways allow for a breadth of options, but a BSM position of a PMF Bty is not necessary for his personal identity nor career.

Position for development by2024-2025	Current Rank	Current Cohort	Developmental Opportunities
Battery Sergeant Major	SGT	2016-2018	<ul style="list-style-type: none"> <li>• Over-seas posting (SMIG UK)</li> <li>• Major international exercise participation (Ex JWS, JWA, RIMPAC, GOLD EAGLE)</li> <li>• Key domestic positions (SOArty SMIG, HQ 1 Div, RMC-D)</li> </ul>
Regimental Sergeant Major	WO2	2014-2018	<ul style="list-style-type: none"> <li>• Over-seas posting (SMIG UK)</li> <li>• Major international exercise participation (Ex JWS, JWA, RIMPAC, GOLD EAGLE)</li> <li>• Key domestic positions (MG NETT, HQ 1 Div)</li> <li>• Domestic opportunities (JF WG, TIP WG, Project Gate WG, manufacturing visit)</li> </ul>
Battery Commander	CAPT	2018-2020	<ul style="list-style-type: none"> <li>• Over-seas posting (SO3 OPS MEU)</li> <li>• Major international exercise participation (Ex LONG LOOK, JWS, JWA, RIMPAC, GOLD EAGLE)</li> <li>• Key domestic positions (CASG, HQ 1 Div, Cbt Bde HQ)</li> <li>• Domestic course (JFETSOC, CTMC)</li> </ul>
Commanding Officer	MAJ	2016-2018	<ul style="list-style-type: none"> <li>• Over-seas CSC that currently employ a similar system (US, France, Korea)</li> <li>• Major international exercise participation (Ex JWS, RIMPAC, GOLD EAGLE)</li> <li>• International postings</li> <li>• Key domestic positions (CASG, HQ 1 Div, Cbt Bde HQ)</li> <li>• Domestic course (JFETSOC, CTMC)</li> <li>• Domestic opportunities (JF WG, TIP WG, Project Gate WG, manufacturing visit)</li> </ul>

## Table 2 – Proposed workforce management plan – L8116 PMF and L8113 LRF

### Conclusion

The RAA has the opportunity to control the narrative and management of the personnel for future roles within force modernisation. The application of proven change management strategies will enable the organisation to promote positive outcomes of the change, while mitigating potential disruptive effects. The publication of a workforce management plan will encourage personal ownership of the change, focus the development of key personnel and potentially manage talent more effectively.

Not implementing a workforce management plan will likely not cause mission failure, although the current arrangement does not optimise the strength of the present workforce nor does it increase the preparedness of the future ready force. It is for all RAA personnel to exploit opportunities within the present means to ensure the collective organisation is the beneficiary.

### Bibliography

- De Bono E (1985) Six Thinking Hats, Penguin Publishing Group, Pg 13-24
- DWM-A (2020) 2020-10-01 Asset Liability Rank Friction - SERCAT 6-7 – Offr, Army Headquarters Sharepoint (accessed 08 Nov 20)
- DWM-A (2020) 2020-09-01 Asset Liability Rank Friction - SERCAT 6-7 – ORs, Army Headquarters Sharepoint (accessed 08 Nov 20)
- Joint Fires Working Group (2019) Course of Action Proposal – Personnel Consideration, School of Artillery Objective (accessed 08 Nov 20)
- Kotter J (2012) Leading Change, Harvard Business School Publishing
- Kotter J (2012) The Heart of Change: Real-Life Stories of How People Change Their Organizations, Harvard Business School Publishing
- Martlew C (2015) Changing the mind of the Organisation, Troubador Publishing Ltd. pg 198
- Gen. McChrystal S (2015) Team of Teams, Penguin Publishing Group, Chap 5 Pg. 97
- Brig Vagg R (2020) Email: Government Announcement: Land 8116 - Protected Mobile Fires RFT (Sent 03 Sep 20)

<sup>1</sup> Martlew C (2015) Changing the mind of the Organisation, Troubador Publishing Ltd. pg 198

<sup>2</sup> Kotter J (2012) Leading Change, Harvard Business School Publishing

<sup>3</sup> Kotter J (2012) The Heart of Change: Real-Life Stories of How People Change Their Organizations, Harvard Business School Publishing

<sup>4</sup> Brig Vagg R (2020) Email: Government Announcement: Land 8116 - Protected Mobile Fires RFT (Sent 03 Sep 20)

<sup>5</sup> Joint Fires Working Group (2019) Course of Action Proposal – Personnel Consideration, School of Artillery Objective (accessed 08 Nov 20)

<sup>6</sup> McChrystal S (2015) Team of Teams, Penguin Publishing Group, Chap 5 Pg. 97

<sup>7</sup> DWM-A (2020) 2020-10-01 Asset Liability Rank Friction - SERCAT 6-7 – Offr, Army Headquarters Sharepoint (accessed 08 Nov 20); DWM-A (2020) 2020-09-01 Asset Liability Rank Friction - SERCAT 6-7 – ORs, Army Headquarters Sharepoint (accessed 08 Nov 20);

<sup>8</sup> Martlew C (2015) Changing the mind of the Organisation, Troubador Publishing Ltd. Chap 8; De Bono E (1985) Six Thinking Hats, Penguin Publishing Group, Pg 13-24

<sup>9</sup> Martlew C (2015) Changing the mind of the Organisation, Troubador Publishing Ltd. Chap 8 pg 140

<sup>10</sup> Ibid

## PROFESSIONAL PAPERS INCENTIVE PRIZES

AUSTRALIAN ARMY HISTORY UNIT AND BIG SKY PUBLISHING PROVIDE THE HEAD OF REGIMENT & THE REGIMENTAL COMMITTEE INCENTIVE PRIZES TO ENCOURAGE INDIVIDUALS TO SUBMIT A CONTRIBUTION TO THE LIAISON LETTER. THE RECIPIENTS OF THE PRIZES ARE SELECTED BY THE EDITOR.

I AM PLEASED TO ANNOUNCE THE RECIPIENTS FOR THIS EDITION ARE ALL THE 4<sup>TH</sup> REGIMENT RAA CONTRIBUTORS:

THEY WILL EACH RECEIVE COPIES OF 'ALLENBY'S GUNNERS' AND DO UNTO OTHERS BOTH BY MAJOR ALAN SMITH & 'ROUNDS COMPLETE' BY MAJOR GENERAL STEVE GOWER.

I LOOK FORWARD TO RECEIVING MORE QUALITY CONTRIBUTIONS FROM ACROSS THE ROYAL REGIMENT FOR FUTURE EDITIONS.

I ACKNOWLEDGE AND THANK THE AUSTRALIAN ARMY HISTORY UNIT AND BIG SKY PUBLISHING FOR THEIR CONTINUING SUPPORT AND ENCOURAGE READERS, ESPECIALLY THOSE INTERESTED IN AUSTRALIAN MILITARY HISTORY TO VISIT

[WWW.BIGSKYPUBLISHING.COM.AU](http://WWW.BIGSKYPUBLISHING.COM.AU) OR THE MILITARY SECTION OF YOUR LOCAL BOOKSHOP.

# Off Time, Off Target: Addressing the Structure of the RAA (OS) Officer Career Courses

*Captain Benjamin May, 4th Regiment, RAA  
Captain Daniel Gillam, 4th Regiment, RAA*

## Introduction

The RAA and our Coalition partners are changing, as is the nature of the battlespace that we may find ourselves fighting in. The complex, integrated contemporary operating environment necessitates an agile, well-rounded junior officer that can both contextualise the battlespace, as well as bring order to it. For these reasons, a review of the learning outcomes addressed by our junior officer course progression is due.

Form should always reflect function, just as the RAA (OS) course structure should reflect our officers' career progression and employment. Unfortunately, this is not currently the case and recent papers have already addressed the shortfalls in the wider RAA junior officer career structure (Table 1). These commanders have questioned the requirements of subalterns, and proposed similar solutions for the course and career structure required to achieve these. Most notably is the removal of the FSO component of ROBC and reallocation as a stand-alone course occurring at the start of the training year. It would see a post-JFT command Captain employed as the FSO, resulting Captains occupying the BK and FSO positions within a battery, and a member from the RAA's large pool of Lieutenants filling their FO position. This paper is based on the eventuation of these proposals, but takes a further, more-critical look at the learning outcomes addressed by the ROGC.

ROGC teaches trainees how to perform as an artillery range planner and OIC practice, instructor in gunnery, and to conduct the duties of an Adjutant and joint fires staff officer (A/OPSO). This paper argues that these learning outcomes are sequenced incorrectly within the RAA (OS) officer's career structure, resulting in these skills being both 'off time' and 'off target.' It will argue for the removal of ROGC from the RAA (OS) officer course structure, and

redistribution of its learning outcomes between the ROBC and FSO courses discussed previously (Table 2). The authors seek to argue that the repositioning of these learning outcomes will better prepare our junior officers for the diverse regimental experiences they will encounter. This will be achieved by deconstructing the learning outcomes currently pursued by ROGC, and reallocating them within the proposed RAA (OS) course structure.

## Getting 'On Time' and 'On Target'

Recent data indicated that of 55 recent ROGC graduates only nine went on to perform the role of BK, providing little return on investment for the qualifications they learn on this course. Due to the majority of Captains posting out of regiments at the end of their second year, their range planning qualification generally does not become relevant until they are a BC (four years later). This not only results in a significant amount of skill fade, but as their future BK would also not be ROGC-qualified, they would then be required to personally draw their battery's traces.

For these reasons, the standard range planning learning outcome of ROGC should be moved to the RAA (OS) ROBC. It is generally accepted that understanding range planning makes more effective FOs. This is because they obtain a more comprehensive understanding of gunnery including ballistics, PEr, and ricochet. Furthermore, as FOs these Lieutenants will have a far better understanding of ballistics and range safety, resulting in more effective fire support planning and execution for their supported combat team. Not only does this increase their own professional ability, but it also improves the RAA's reputation. The authors argue this concept a step further, proposing that the ability to conduct range planning also makes a more qualified and competent CPO. CPOs are designated artillery range safety appointments, yet they do not receive any formal artillery range



safety training that would qualify them to assume this responsibility—learning standard range planning on ROBC would rectify this issue. Whilst it might be argued that standard range planning is too complex for junior Lieutenants, the authors would point out that this learning outcome only serves to solidify and build upon the ballistics and ammunition characteristics already taught on this course. Further, range planning is merely a process, and there is no learning outcome acquired between ROBC and ROGC that makes an officer inherently better at range planning—it is a fundamentally new process regardless of when it is taught. The difference is that a Lieutenant’s range planning skills can then be honed and employed for the next five years of regimental time (on average).

This is also a matter of opportunity cost—there are more important things a BC could be doing other than drawing traces, especially when they have qualified subordinates who understand their intent. The self-evidence of this concept is embodied in the scenario for the current ROGC range planning assessment, which tasks the trainee (the BK) to construct a trace meeting the requirements stipulated by their notional BC. This is not to say that BCs should be detached from range planning—guidance and intent must still be provided in order to empower their subordinates. Herein lies the difference between ‘range planning’ and ‘trace drawing’—the former is a function of command, whilst the latter is a function of control. In the long term, this recommendation would significantly increase the RAA’s corporate knowledge, as the next generation of BKs and A/OPSOs will have up to four years of range planning experience. This enables them to produce traces of far better quality, resulting in more effective battery and regimental training (especially because BCs could then devote more time to exercise design). Most notably, this reallocation of learning outcomes does not increase the total time spent on courses, but rather repositions them so they are ‘on time’ and ‘on target’ (this model would ensure that 100% of FSOs and BKs are qualified in range planning).

Recent papers have argued for the investment in, and removal of the battlegroup fire support planning component of ROBC, and reallocation as a stand-alone ‘FSO course.’ The FSO course would be conducted as a third year Lieutenant or first year Captain in accordance with Table 2. This paper proposes that this stand-alone ‘FSO course’ is augmented with the remaining

learning outcomes currently pursued by ROGC. This model better prepares junior Captains for employment in a battlegroup JFECC, and enables ROBC trainees to focus on understanding the core aspects of gunnery such as ballistics, equipment principles, and fire discipline. The brigade fire support, IG, OIC practice, and advanced practice range planning components of ROGC are better suited to the FSO course for a number of reasons. Primarily, it makes sense for the brigade fire support planning component of ROGC to be taught after learning about battlegroup fire support. This logical transition would see these two learning outcomes combined on the FSO course, enabling its trainees make the conceptual shift from fire support execution to fire support planning.

Additionally, as the FO with the most current experience, the FSO is uniquely positioned to mentor the next generation of JFT commanders. As they receive experience in the battlegroup JFECC, they can add context when discussing how a FO’s actions affect both combat team and battlegroup manoeuvre from a planning perspective. The advanced range planning qualification also acts as a logical stepping-stone from the standard range planning received on ROBC. It provides an additional touch point to consolidate this skillset, enabling them to mentor junior range planners and provide a degree of quality control for the BC. Finally, for technical shooting exercises the FSO is in a good position to OIC certain practices, enabling the BC to focus on instructing and assessing new FOs. Exposure to OIC practice at this more-junior level in a controlled environment better prepares junior officers for the role of DPRAC that they will assume later in their career. Again, this reallocation of learning outcomes incurs no net increase to the time allotted to these courses.

## **Conclusion**

This paper sought to generate discussion on whether the learning outcomes pursued by the RAA (OS) officer courses are sequenced correctly, and proposed a model that is better aligned to the current employment demands. It has argued that the core learning outcomes within the RAA (OS) officer course structure are structured inefficiently, resulting in skillsets that are ‘off time’ and ‘off target’ when compared to employment demand. It was shown that only a small number of ROGC-qualified Captains go on to be employed as BKs, providing a negligible return on investment and detracting

from the BC's capacity to command their battery.

It proposed that the basic range planning component of ROGC be reallocated to ROBC. The paper also drew on previous works in support of establishing a 'FSO course' to increase the effectiveness of junior Captains employed as battlegroup and brigade fire support planners. It argued that this course better defines what the RAA demands from junior officers at this stage of their career, and should therefore inherit the technical range planning, IG, OIC practice, and brigade JFECC components of ROGC. By reallocated these learning outcomes to this course, FSOs can provide quality control to the trace drawing now done by Lieutenants, as well as leverage their experience to mentor and IG new FOs. All of this frees up the BC to focus on commanding their battery, whilst adding no additional time to courses.

Once the officer course structure presented in this paper matures, the RAA will benefit from more well-rounded junior officers that can conduct range planning immediately following graduation from ROBC. It would see CPOs and FOs with a greater understanding of their primary equipment, resulting in more effective fire support and subsequently, an increase to the RAA's reputation amongst their supported arms. It will increase the quality of battery and regimental training by enabling BCs to focus more effort on exercise design and empowering junior officers with years of experience conduct range planning in accordance with their BC's guidance and intent. What this paper has not addressed is the change management process that would need to occur to ensure a smooth transition and the requisite upskilling as a result of adopting this model over the current structure.

## References

- Australian Army, Land Warfare Procedures – General 7-3-3 Indirect Fire Range Orders, 2019
- Clarke, Nicholas. "The Offensive Support Junior Officer Career Progression is Wrong," Bridges Papers 1, no. 1 (2020): 74 - 79
- Combined Arms Training Centre (2020), RAA (OS) Regimental Officer's Gunnery Course, LMPSS
- Pamenter, Kevin, Andrew Martin, Michael Robinson, William Ryan and Craig Hogendyk, "The RAA Offensive Support (OS) junior officer employment model is all wrong!" Bridges Papers 1, no. 1 (2020): 65 – 73

### Seeking Your Support

The Gunners' Fund is designed to provide a source of income that can be utilised for the benefit of all Gunners – regardless of rank. This income is generated from fortnightly or annual subscriptions from serving (both ARA and Reserve) and ex-serving members of the RAA, life memberships and various donations. The current size of the Fund is relatively small, especially when compared to other Regiments and Corps funds in the Army. As a result, it is only able to provide relatively modest levels of support within the RAA. This will improve as the subscriber base grows. The Fund is managed as a Non-Public Monies Account by the SO2 Head of Regiment and is with Australian Military Bank.

The Head of Regiment's intent is that the fund is utilised to foster our Regimental spirit, not only by ensuring our past is captured, but also by ensuring we continue to build our identity into the future. As such it is his vision, as the Fund grows, that we can begin to provide greater support to prizes, awards and incentives. Ideally this will encompass recognition of individual and team achievements, written articles, memorial and museum projects, bereavement needs, as well as special projects requested by individual members or sub-units/units of the Royal Regiment and affiliated Associations.

The Gunners' Fund not only belongs to past and present Gunners, but also to our successors. We must leave them a strong and vibrant 'family'. This is only possible with support from individual subscribers. If you have any questions or would like to receive a subscription form, please contact the Fund's Treasurer, Major Gary Down, on 03 5735 6267, mobile 0407 140 036 or email [gary.down@defence.gov.au](mailto:gary.down@defence.gov.au).

Your contribution, along with all the other serving and retired members of the Royal Regiment who are making a similar commitment, is extremely important in ensuring the Regimental Committee can support the fostering of our esprit-de-corps and ensure our unique 'Gunner identity' remains a fundamental part of Army's culture and traditions.

Once a Gunner, always a Gunner!

# The Implementation of Army JTACs In The Battlegroup Joint Fires and Effects Coordination Centre

*Lieutenant Jack Cailles, 4th Regiment, Royal Australian Artillery*

## Introduction

The Battlegroup airspace coordination deficiency can be solved through better use and management of Army's JTACs. As it stands, the Battlegroup JFECC has little to no control over its airspace and requires approval from the Brigade JFECC and Tactical Air Control Party (TACP) to execute Joint Fires and Effects (JFE) in support of their manoeuvre elements. This relationship has the potential to create lengthy delays that can slow the execution of JFE and manoeuvre tasks. Throughout this essay, the problem of airspace control will be outlined, and the Battlegroup JFECC's airspace control requirements will be identified in order to shape the key recommendations that follow. To note, May provided two recommendations to facilitate Battlegroup airspace control. The first being the implementation of a small RAAF Airspace Control Element (ACE) consisting of three airspace controllers and an E06. Theoretically, this concept has merit, however, due to staffing and equipment constraints, this recommendation is impractical and likely to be unachievable in the near future. The second is the implementation of Army JTACs to the Battlegroup JFECC as 'Battlegroup Airspace Controllers' and will be explored in further depth.

The TACP and Battlefield Airspace Control Liaison Officer (BACLO) are responsible for joint liaison and control of the airspace in accordance with the delegated Airspace Control Authority (ACA) and Brigade Commander's intent. This team represents the lowest Subordinate Airspace Control Authority (SACA) within the divisional order of battle. Therefore, all JFE that use the Brigade airspace must be requested and subsequently approved by both the TACP and Brigade JFECC. Due to limited staffing within these organisations and their likely requirement to handle multiple Battlegroup requests simultaneously, the approval for the execution of JFE within the

Battlegroup can be extremely delayed. These delays undermine the ability for the Battlegroup JFECC to provide timely and accurate support to its manoeuvre elements.

This problem lends itself to the idea that, in order to expedite the execution of Battlegroup JFE, a small, yet sustainable SACA be established within the Battlegroup JFECC. Currently, the Battlegroup JFECC does not have the appropriate personnel with the relevant qualifications to absorb the responsibilities of airspace control. However, Artillery Regiments do possess people with qualifications that relate to airspace control and coordination, JTACs.

## Battlegroup Airspace Control Requirements

The Battlegroup JFECC is currently staffed by an FSO, generally a second year lieutenant, an ACSO Supervisor and two ACSO soldiers. None of these members receive formal training in airspace control or de-confliction, but instead are merely theoretically introduced to Airspace Control Means (ACMs) rather than their practical application. Furthermore, none of these individuals have the capacity to provide well-informed input to Battlegroup JFE planning (especially as it relates to air assets). Acknowledging the JFECC staff's lack of training in this area is important; however, the establishment of Battlegroup airspace control does not necessarily require a large team of experts.

The conduct of airspace control at the Battlegroup can be achieved in a relatively simple manner—through the designation of a JTAC within Battlegroup headquarters as the Battlegroup Airspace Controller, a SACA to the TACP. For example, in this role, a JTAC can request to establish an Airspace Coordination Area (ACA) that encompasses the Battlegroup AO, for approval by the Brigade JFECC (Figure 1). This establishes a means of procedural control to de-conflict surface-to-surface fires



with aircraft within the Battlegroup airspace. In any instance whereby an aircraft needs to breach this ACA, the Battlegroup Airspace Controller can take positive control of that asset in order to ensure its safe transit and mission conduct. This is merely one example for procedural control, there are a number of other ACMs that a JTAC can utilise to safely coordinate the airspace.

Additionally, the Battlegroup Airspace Controller can provide any asset in direct support to the Battlegroup ‘clear air,’ as they are constantly monitoring the Battlegroup airspace and established ACMs. Any activity that requires coordination over multiple Battlegroup airspaces (e.g. long-range fires) should be referred to the Brigade JFECC and TACP for coordination and de-confliction.

Colloquially, FORCOMD JTACs have been associated with attaching to forward manoeuvre force elements to provide Terminal Attack Control (TAC). A qualified JTAC within the Battlegroup JFECC has the ability to achieve the technical responsibilities of a Battlegroup Airspace Controller as they possess a thorough understanding of ACMs and airspace deconfliction. A JTAC operating from Battlegroup headquarters will also be able to provide TAC in support of multiple manoeuvre force elements from the Battlegroup Headquarters through both type two and three controls. By doing this, a JTAC in Battlegroup Headquarters will promote the use of JFOs for the targeting, correlation, and execution of air-to-surface engagements. JFOs are currently underutilised in this domain. This proposal will create further opportunities for JFO development due to an increased requirement to support air-to-surface engagements in support of the JTAC located within the Battlegroup JFECC.

Army JTACs have a thorough understanding of the planning and application of ACMs within their immediate AO. A JTAC may have difficulties supporting Battlegroup JFE planning and SMAP as a whole, (depending on their rank and experience) however, they maintain the ability to provide sound advice to the commander in relation to the application of air assets. Unfortunately, due to their lack of training in airspace control and coordination, they cannot lean on other members of the JFECC to achieve a 24-hour airspace control effect. Therefore, it is imperative that Army seek to develop the JFECC staff to ensure they can support Battlegroup airspace control.

## Recommendations

To immediately establish a form of Battlegroup airspace control, it is recommended that unit JTACs attach to the BG JFECC as the Battlegroup Airspace Controller. Throughout the initial implementation of this concept, the primary task of this individual is to coordinate surface-to-surface and air-to-surface fires within the Battlegroup airspace and allocate air clearances to airspace users. Their secondary task is the support to concept development. This will include SOP/doctrine development, the identification of the requirements of a Battlegroup Airspace Controller, any equipment deficiencies, and any training shortfalls within the JFECC that inhibit their ability to achieve airspace control.

The baseline unit entitlement of JTACs is five per regiment. Therefore, each regiment does not possess the number of JTACs required to allocate one to each supported manoeuvre sub-unit. Each regiment does however possess enough JFOs to support each sub-unit. To centralise a JTAC within battlegroup headquarters will ensure each supported sub-unit will have access to TAC. In the event that a regiment is deficient in JTACs, or require additional support, access to JTAC Troop staff should be made available. This organisation exists to fulfil FORCOMD JTAC preparedness requirements and support the training and management of all JTAC functions within FORCOMD. Consequently, they are the perfect candidates to support the implementation of airspace control at the Battlegroup level through concept development as well as training and planning support.

Throughout initial phases, this concept will require strong supervision from the TACP at Brigade Headquarters, or in person from a qualified RAAF member during any complex live fire activity. A lack of appropriately qualified or available personnel to fulfil these positions presents the biggest risk to the proposal made in this paper. Therefore, it is vital that JTAC Troop members and other FORCOMD JTACs who are not posted to artillery regiments are made available for use throughout live and simulated exercises in order to test, prove and develop the concept of a Battlegroup Airspace Controller. It is important to note that the TACP will always maintain overall control over each Battlegroup’s airspace in a supervisory role.

The implementation of these recommendations alone will not result in a well-rounded Battlegroup airspace control system. A JTAC within Battlegroup Headquarters must be prepared to coordinate and de-conflict JFE, provide air-to-surface planning input, and control complex CAS missions for multiple sub-units. For these skills to be maintained, training and exercise planning must include a focus on the Battlegroup airspace. Live and simulated training should seek outcomes that encompass the following:

- ACM planning, establishment and monitoring
- Increased aircraft integration
- Complex CAS missions and airspace coordination scenarios

The redirection of JTACs to the Battlegroup JFECC to achieve airspace control will require the support of other JFECC staff members. Therefore, Army must seek to improve the training of the FSO and ACSO Bombardiers/Sergeants in order to support the 24-hour operational requirement of airspace control. Currently, these personnel are generally well trained as system managers and in the coordination of surface-to-surface fires and have a thorough understanding of artillery planning considerations. However, there is little understanding of Battlegroup JFE planning, aircraft capabilities and the processes for de-conflicting and coordinating the airspace. Consequently, these personnel would be unable to support a JTAC fulfilling the role of Battlegroup Airspace Controller.

Army should look to amend the training that junior artillery officers receive, as recommended by both Clarke and Pamerter. The training outcomes of the Subject 4 ACSO Bombardier course should also be amended to reflect the requirement to support Battlegroup airspace control if this concept is to be implemented. These amendments for both rank groups should see the inclusion of training that teaches future JFECC staff how to plan and apply ACMs as well as general airspace de-confliction rules. These members do not need to be subject matter experts in airspace control or air asset integration. They simply need to have the ability to monitor the Battlegroup airspace and any active ACMs in order to notify the Battlegroup Airspace Controller should any de-confliction or coordination be required.

## Conclusion

The Battlegroup JFECC is responsible for coordinating and executing JFE in support of manoeuvre force elements. They have the capacity to rapidly de-conflict surface-to-surface fires with ground forces; however, this efficiency is undermined by the requirement to transfer all air clearance requests to the Brigade JFECC. This can cause lengthy delays that may subsequently restrict a Battlegroup's ability to execute timely and effective JFE in support of manoeuvre. To reduce the burden on the TACP and to expedite the execution of JFE it has been recommended that Army JTACs be placed within the Battlegroup JFECC as a SACA to the TACP. From this position, this person—with support of other JFECC staff—can request and monitor Battlegroup ACMs, provide TAC to multiple sub-units, take positive control of aircraft within their airspace, and provide air clearances to subordinate fire support elements. These changes can be immediate, through the redirection of JTACs and an increased focus on the Battlegroup airspace during training. This will become increasingly important as the Royal Regiment of Australian Artillery moves towards an increased number of systems and weapons as the burden of airspace control at the Brigade level will only increase. As such, the delegation of airspace control to the Battlegroup can ensure that all JFE systems are able to provide timely support to the joint force in the future.

## References

Clarke, Nicholas. *The Offensive Support Junior Officer Career Progression is Wrong*, Bridges Papers 1, no.1, 2020

Department of Defence, *AAP 1002 The Operational Air Doctrine Manual 2nd Ed* (Glenbrook, Headquarters Air Command, 2006), p. 7-3.

Headquarters Forces Command, *COMD FORCOMD Directive 25/20, FORCOMD Joint Terminal Attack Controller Management Plan- AMDT 04*, New South Wales, 2020

Joint Capability Coordination, *ADF Concept of Operations for Joint Terminal Attack Controllers*, Canberra, 2014

May, Benjamin, Ebrahim Tabandeh, Jack Cailles, *Battlegroup JFE De-confliction and Airspace Control*, Bridges Papers 1, no. 1, 2020

Pamerter, Kevin, Andrew Martin, Michael Robinson, William Ryan and Craig Hogendyk, *The RAA Offensive Support (OS) Junior Officer Employment Model is All Wrong!*, Bridges Papers 1, no.1, 2020

# Artillery illuminating ammunition: Tactically useful or a roman candle?

Lieutenant Colonel Simon Hunter and Major Kevin Pamerter

*“In this business, you find the enemy, then go after and destroy him. Everything else is rubbish” – Eddie Rickenbacker*

Darkness has long been an ally to those seeking to achieve surprise or avoid detection from their enemy, however, with the recent, and seemingly continual, advances in night fighting equipment it begs the question: “Is artillery white light illumination tactically relevant?”

## Tactical relevance

To question the relevance of illumination we must first consider the tactical objectives:

- to aid the observation of fire,
- to assist the movement of own troops,
- to illuminate enemy activity, and
- to diminish the effectiveness of some enemy night observation equipment.

Noting the suite of night fighting equipment in our observation posts and among our manoeuvre elements, it is proposed that the value of

illumination in the visible spectrum is almost negated to the point of irrelevance, particularly for the first three objectives.

The second great challenge to the usefulness of the illuminating round is that it must provide battlefield benefits that justify the risk of unmasking the guns – an equation that becomes much more difficult to balance when fighting a near peer adversary who possess credible counter fires capability.

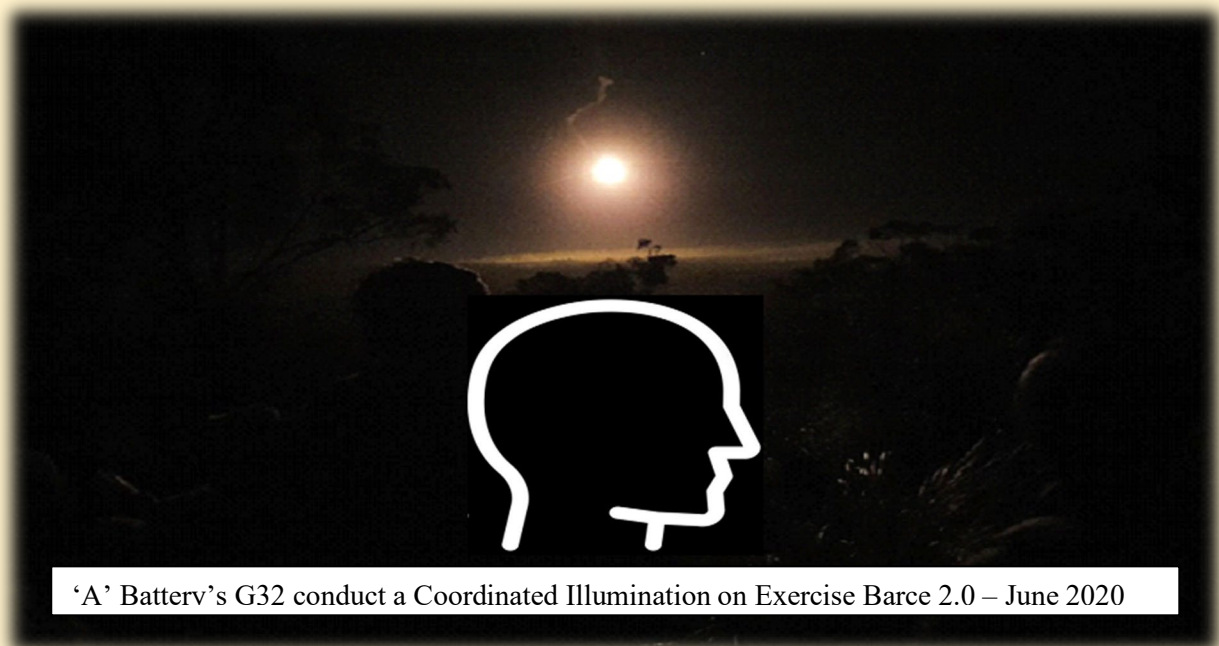
---

*... “Is artillery white light illumination tactically relevant?”*

---

Sustained illumination engagements associated with harassment & interdiction fire plans, to keep the enemy awake or force them to take counter measures while denying the cover of darkness, are concepts that rely on a negligible counter battery threat. Even with improved survivability facilitated by Protected Mobile Fires, the unmasking of the guns for protracted periods is inviting unwanted enemy attention, therefore it must be justified by the tactical effects.

Some may propose an investment in IR illumination may be a likely and superior



‘A’ Battery’s G32 conduct a Coordinated Illumination on Exercise Barce 2.0 – June 2020



alternative, however the value of this is dependent on a significant night fighting overmatch, which cannot be assumed as the ADF prepares for a near peer adversary.

### Cost benefit factor

The illuminating projectile is more expensive than HE natures and cost per round is due to roughly double with the arrival of the Assegai fleet. Discontinuation of the use of illumination (at the conclusion of current contracts and expenditure of current stockholdings) will provide resources that can be directed to natures that deliver greater tactical effect. Resources aside, the disestablishment of an artillery delivered illumination capability will create additional capacity on platforms, ammunition trucks and along the supply chain for other natures of more tactical value. Based on current first line configurations for a Battery, substitution of high explosive with illumination would result in 56 rounds of more tactical worth.

---

*The second great challenge to the usefulness of the illuminating round*

...

### Conclusion

While it is clear this paper has a bias towards divesting the capability provided by artillery illuminating ammunition, it is acknowledged there would be a requirement for more detailed analysis and broader consultation before such an outcome. The intent of this paper is to commence discussion and potentially initiate a formal capability review to guide the sustainment and future procurement of artillery illuminating ammunition.

---

#### **WILLIAM, KATE SEND ANZAC BISCUITS IN TOUCHING TRIBUTE, PRINCESS ANNE JOINS DAWN SERVICE**

*Zoe Smith, Justin Lees and Amanda Sheppard  
April 26, 2021, The Courier Mail*

Princess Anne has represented the Royal Family at the first of two Anzac Day services in London, starting with the Anzac Day Dawn Service at the Wellington Arch in Hyde Park. Anne laid a wreath at the Australian and New

Zealand War Memorials on behalf of her family and signed a Book of Remembrance.

On Sunday, local time, Anne and her husband



Vice Admiral Sir Tim Laurence then visited Westminster Abbey for the Anzac Day Service of Commemoration and Thanksgiving.

Princess Anne, Princess Royal, lays a wreath at the Australian War Memorial during a Dawn Service to commemorate Anzac Day at Wellington Arch in London. Picture: Jonathan Brady/POOL/AFP

George Brandis, Australia’s High Commissioner to the UK, said in a tweet it was a “solemn Dawn Service completed here in London. With crowds not possible, we’ve created a virtual commemoration for our community.”

#### **WILLIAM, KATE SEND ANZAC BISCUITS IN TOUCHING TRIBUTE**

Prince William has paid a heart warming tribute to the “indomitable spirit” of Australian and New Zealand soldiers as he marked Anzac Day with a batch of biscuits. William led Anzac tributes from the royal family royal tributes. A video posted to the Kensington Royal social media accounts showed the Duke of Cambridge signing a typed note and sealing it into an envelope. The note read, the post said: “This Anzac Day, Catherine and I join Australians and New Zealanders across the world to remember and honour the service men and women of the Australian and New Zealand Army Corps.”

The video then shows a messenger taking the note, along with a batch of Anzac biscuits in cellophane wrapping, on foot from Kensington Palace and walking through London to New Zealand House where a uniformed staffer greets the messenger at the front door. The messenger then delivers the same note and parcel to Australia House in Holborn.

# Book Review

## CLASH OF THE GODS OF WAR

### Australian Artillery and the Firepower Lessons of the Great War

Edited by William Westerman & Nicholas Floyd

#### REVIEWS IN BRIEF

##### Michael O'Brien

Too few of the recent accounts of the Great War place gunnery in its correct perspective. This book redresses this imbalance and traces the increasing power and importance of artillery development well.

Every gunner officer and all those interested in the role of Australian artillery in this conflict should find this book of singular importance.

*Rated 5 out of 5*

##### RUSI – Vic Library

This book results from a lingering dissatisfaction with the history of Australian artillery, especially in the First World War (or perhaps a lack of understanding of it by recent generations of soldiers). It led to a seminar series (Firepower: Lessons from the Great War, available in full at: <https://cove.army.gov.au/article/firepower-lessons-the-great-war>) and to the consolidated papers in this volume. The authors are a satisfying mix of professional gunners and historians.

*Rated 5 out of 5*

##### Military Books of Australia

Overall, the collection, which includes numerous previously unpublished Great War images, aims to showcase the breadth and diversity of topics in relation to the deployment

of artillery and how Australia's fledgling and inexperienced field and garrison artillery forces faced the challenge of a major conflict. Full Review:

<https://militarybooksaustralia.wordpress.com/2020/06/19/the-clash-of-the-gods-of-war-australian-artillery-in-the-great-war/>

*Rated 5 out of 5*

##### Peter Masters

There is a stellar cast of contributors to this book which is an edited collection of papers presented during the Firepower: Lessons from the Great War seminar series conducted by the Royal Australian Artillery Historical Company (RAAHC) [click the link for more information] – over the commemoration period 2014-2018.

Among the familiar names are Jean Beau, Roger Lee and Mark Lax, to name just a few.

*Rated 5 out of 5*

##### RUSI VIC

The excellent photographs that are included have many from the Artillery Historical Company's collection – a great resource.

*Rated 5 out of 5*

**Gary Sheffield** –  
**University of**

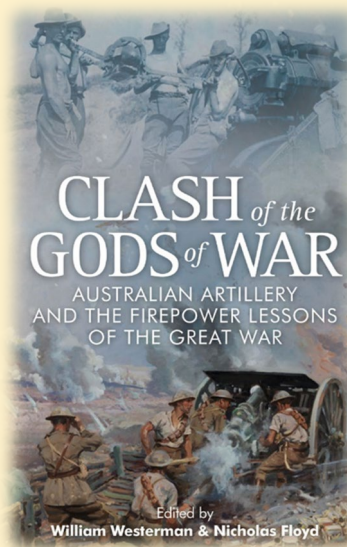
##### Wolverhampton, UK

The editors, William Westerman and Nick Floyd, have done a tremendous job. This is an extremely important contribution, not just to Australian military history, but to the history of the First World War. It will become a standard work and surprisingly, given the technical nature of the subject, it is very readable.

*Rated 5 out of 5*

##### Justin Chadwick

Important contribution to Australian military historiography.



# Cannonball Supplement History & Heritage

## WARRANT OFFICER HENRY GREEN OF THE NEW SOUTH WALES ARTILLERY

*Keith Glyde,  
RAA Regimental History Committee*

On 7th August 1871 a former sergeant of the Royal Artillery (RA) resident in Australia, Henry Green, was attested into the New South Wales Artillery (NSWA) in the rank of Battery Sergeant Major (BSM).<sup>i</sup> In August 1876 he was promoted to Brigade Sergeant Major, and subsequently to Warrant Officer in June 1884.<sup>ii</sup> He remained in this rank, and the appointment of Brigade Sergeant Major, until he was placed on the Reserve of Officers of the New South Wales Military Forces with the honorary rank of Second Lieutenant in November 1896.<sup>iii</sup> He was retired on 1st September 1902 and passed away on 30th May 1918 at 89 years of age.<sup>iv</sup>

Henry Green remains an iconic figure in the Royal Australian Artillery (RAA) today, but this status is no modern invention. In 1896 on the eve of his retirement one newspaper heralded him as the "father" of the New South Wales Artillery, suggesting that his departure would be much lamented.<sup>v</sup> Indeed it is reported that he was familiarly known in Victoria Barracks as "No 1" after his Regimental Number, 1.<sup>vi</sup>

Henry Green was born on 24th January 1830 at Seaford, East Sussex. He enlisted in the Royal Artillery at nearby Eastbourne, East Sussex, on 1 December 1847, claiming his age as 18 years and his occupation as labourer. According to late 19th Century newspaper articles on his career he was initially posted to the 9th Battalion RA and five years later to the Royal Horse Artillery.<sup>vii</sup> He was promoted to the rank of bombardier on 21st January 1854, and to corporal on 9th May

1855. His promotion to sergeant was made on 26th January 1856 and he remained in this rank until his discharge from the British Army at Swansea, Wales, on 15th December 1868.

Although Cubis credits Green as a Crimea veteran, his participation in this campaign was restricted to conducting a draft of horses to the British forces in the Crimea, arriving at Balaclava after the Treaty of Paris was signed on 30 March 1856.<sup>viii</sup> As his service fell after 9th September 1855, the date of the fall of Sevastopol, he was not awarded the Crimea Medal in consequence.<sup>ix</sup> He served at Scutari before re-joining his unit in the United Kingdom after 5 months abroad.

---

***Although Cubis credits Green as a  
Crimea veteran, his participation in  
this campaign was restricted ...***

---

On 15th September 1857 he arrived in India, probably as a member of No 5 or No 6 Company, 13th Battalion RA. These companies deployed to India in September 1857 from the United Kingdom via Hong Kong to take part in operations during the great uprising known as the Mutiny and their service in 1857 conforms to that recorded for Green during the same period. In 1952 his son, Mr H J Green, wrote that Henry Green was one of those who knelt by the well at Cawnpore, scene of an atrocity, and swore vengeance.<sup>x</sup> He was also at the relief of Lucknow although there is perhaps some confusion as the story was handed down over the years. It is recorded that Sergeant Green was at the relief of Lucknow under General Grant and that a force under General Havelock just beat Grant to Lucknow. They could hear bagpipes in the distance as Havelock's men were entering the city.<sup>xi</sup> This statement must be incorrect as Havelock's force arrived at, and reinforced the garrison at the Residency, Lucknow, on 25th September 1857. The relieving force under Sir Colin Campbell, with Grant as his second in



command, did not enter Lucknow until 17th November 1857, at which time the garrison sallied out of the Residency. The pipes he heard were no doubt those of the 78th Highlanders, which were part of Campbell's relief force.

In early 1860 Henry Green returned to the United Kingdom, and by 1861 was a member of the Coast Brigade RA at Cardiff, Wales. This unit was scattered at stations across the United Kingdom and the colonies overseas with the responsibility for maintaining the armament and stores of the fixed defences. He was discharged on a pension in December 1868 and later immigrated to New South Wales with his family, arriving in January 1871.<sup>xiii</sup>

Henry Green appears to have immediately enlisted in the NSW Volunteer Permanent Staff as a drill instructor to the NSW Volunteer Artillery and assisted in mounting heavy ordnance in the fortifications at South, Middle, and Georges Heads during March of that year. The raising of a battery of permanent artillery in NSW in August 1871 led to him becoming the senior non-commissioned officer of that force at its inception. There is some evidence that he was also active in the recruiting of the new battery.

---

***The raising of a battery of permanent artillery in NSW in August 1871 ...***

---

The majority of the one hundred or so enlisted members of this new battery had to be trained both as soldiers, and in their duties as gunners. When they were not installing armament or training in the fortifications the men were instructed in siege artillery work with rifled breech-loading 40-pounder guns on field carriages. For about 20 half-days per year the original battery was occupied in instruction and practice in field artillery drills with smoothbore guns and howitzers.<sup>xiii</sup> Foot and arms drill were also a feature of their training.

For many years, the gunners were employed in the arming of the fortifications around Sydney, undertaking a substantial amount of repository work. This latter task entailed the movement to the batteries of ordnance weighing up to 25 tonnes from where it was landed ashore in Port Jackson by utilising wooden skidding, spars and sheer-legs, ropes, and pulley blocks, gins and capstans, and manpower. There were often considerable distances to be traversed across country in this manner. Once at the battery similar techniques were used to mount the ordnance on its carriage in the emplacement. It was both a science and an inherently dangerous

procedure requiring a high level of skill, man-management, and teamwork.<sup>xiv</sup> Henry Green's service in the Coast Brigade RA and his experience of such work in NSW earlier in 1871 would have proven invaluable in his new corps.

Henry Green's contribution to the training and development of the New South Wales Artillery cannot be overstated. He was the only senior member of the original battery with artillery experience. The first two officers, including the battery commander, appointed to the force were formerly of the Royal Marines. A third was Royal Navy, and the fourth was infantry. A similar pattern characterised later officer appointments. It was not until 1876 that the first Gunner officer was appointed to command the expanded force. Another was appointed in 1877 from the NSW Volunteer Artillery. There was thus initially no accumulated knowledge or experience in artillery-related subjects at command level.<sup>xv</sup>

There is no doubt that Henry Green had a flair for instruction. In December 1871, the Captain of No 8, or Prince Alfred's Own Battery, Volunteer Artillery, presented Sergeant Major Green with a purse of 25 sovereigns, a considerable sum of money, out of respect and gratitude for his careful instruction in drill.<sup>xvi</sup> His efforts had allowed this battery, formed in July of that year, to become proficient in only four months. A similar testimonial was given to Green during the same month by No 5 Battery, Volunteer Artillery. In 1880 Henry Green was appointed as the instructor to the Cadet Artillery, a position he retained until late 1883.<sup>xvii</sup>

---

***Modern accounts of his service invariably associate him with membership of A Battery. This is due to a relatively modern flawed acceptance of lineage ...***

---

When the original battery was expanded to two, and later three batteries, Henry Green became the equivalent of today's Regimental Sergeant-Major. Modern accounts of his service invariably associate him with membership of A Battery. This is due to a relatively modern flawed acceptance of lineage that identified the original battery of NSW as being the direct predecessor of the current A Battery RAA. The original battery of the NSW became, however, No 1 Battery on 22nd August 1876 and a new No 2 Battery was raised on this date. It is No 2 Battery that subsequently formed the nucleus of the permanent field battery later designated A Battery. Green was transferred to the Regimental

Staff of the NSW on 22nd August 1876 and thus never served with the direct predecessor of A Battery. There is no doubt, however, that he played a major role in shaping its progress as the Brigade Sergeant-Major, both by setting an example with his high standard of conduct, and by his careful impartation of instruction to his subordinates

In 1885 he accompanied the contingent to the Sudan as a supernumerary in charge of the horses. It was the intention that he would return home to train the inevitable reinforcements required for a long campaign but in the event, he returned with the remainder of the contingent.

Nor did his interest and dedication to the Service end after retirement. In February 1897 he was a member of the official party that witnessed the shipping of the horses for the NSW Mounted Rifles contingent proceeding to England. He is also reported to have served temporarily as Riding Master during 1900-1901, training NSW Bushmen's Contingents to the Second Anglo-Boer War.

---

***It is No 2 Battery that subsequently formed the nucleus of the permanent field battery later designated A Battery.***

---

As testimony to his long and honourable service of 21 years in the Royal Artillery he was awarded the Army Long Service and Good Conduct Medal, denoting 18 years irreproachable service as an NCO or man in the Regular forces. After 25 years with the NSW Military Forces and subsequent, to his commissioning on the Reserve of Officers, he was awarded the Colonial Meritorious Service Medal (NSW), earned for 21 years meritorious service as a Warrant Officer or senior NCO.<sup>xviii</sup>

The Australian Army, including the Royal Australian Artillery, has perpetuated his memory. A Norfolk Pine was planted in his honour at Victoria Barracks in 1952, and in 1975 his granddaughter presented the Army Museum of NSW with his cap, medals, a technical notebook, a personal record book and a photograph of him. Another photograph was displayed in the Sergeants Mess of 1st Field Regiment as early as 1962. A Field Battery established the Henry Green Room in its offices at Coral Lines, Holsworthy NSW. When this battery was relocated to Gallipoli Barracks, Enoggera, Queensland, the A Field Battery Association Inc established, and currently

maintains, a history room there that is named for him.

Some aspects of his service are, however, often confused in modern writing, generally because of our misunderstanding of terminology and practices current in the 19th Century.

Much has been made for instance of the allocation of the regimental number 1 to Henry Green on his enlistment in the NSW. This has led to claims that he was the first non-commissioned officer of the Permanent Forces, and even the first soldier in the Australian Army.<sup>xix</sup> On the contrary, Henry Green was allotted at least two regimental numbers during his service in NSW. The first of these, as yet unknown, was allotted on his enlistment as a drill instructor in the NSW Volunteer Permanent Staff in early 1871. The reason for this lies in the numbering practice for individual soldier's current in Henry Green's time. Unlike today's PMKeys number, or even its predecessor Army Number, a man's personal service number was strictly a regimental number, identifying him only within his unit. The same number might well have been borne by many other members of a particular defence force at the same time.

---

***Much has been made for instance of the allocation of the regimental number 1 to Henry Green ...***

---

Until the end of 1921 every unit, or corps, of the Australian colonial defences forces and the Australian Military Forces was responsible for issuing a man with a regimental number when he enlisted into that unit or corps.<sup>xx</sup> The number was specific to that unit only, and all units started their numbering at '1' on their formation.<sup>xxi</sup> If a man transferred to another unit or corps he received a new regimental number, the next available in the sequence already in use by his new unit. Officers were not allotted regimental numbers.

Under these circumstances the permanent Victorian Artillery, raised on 1st January 1871, would have issued the regimental number '1' to its first enlisted rank, who was probably but not necessarily, its sergeant major. It is possible that the sergeant-major of the permanent NSW Infantry, raised in 1871 at the same time as the NSW, also carried the number '1'.

Thus, Henry Green on enlistment in the NSW Volunteer Permanent Staff was allocated a sequential number in that group of individuals. It was certainly not the number '1', a non-commissioned permanent staff for the

Volunteers having existed since at least 1860. When the NSW was raised it too followed this system, commencing their numbering at '1', which number was allotted to Henry Green. This was strictly a regimental number indicating only that Green was the first soldier to be enlisted into the NSW Artillery.

No significance or precedence in the wider Defence Force can therefore be attributed to the regimental number 1 allotted to Henry Green.

Greater confusion pertains to his actual rank on enlistment in the NSW. The Army Museum of NSW records for instance that in 1871 he was appointed in the NSW as Battery Sergeant Major with the rank of Staff Sergeant.<sup>xxii</sup> Both Murray in 1903 and Cubis in 1978 record him as Staff Sergeant.<sup>xxiii</sup>

---

***No significance or precedence in the wider Defence Force can therefore be attributed to the regimental number 1 allotted to Henry Green.***

---

Misunderstandings relating to Henry Green's rank are evident even before he enlisted in the NSW. *The Sydney Morning Herald* of 30th March 1871 for instance described him as formerly a sergeant-major in the Royal Artillery.<sup>xxiv</sup> A similar statement was made in November 1896.<sup>xxv</sup> These articles are in error in this regard as the Army Museum of NSW, in possession of his service record, established that he only held the rank of sergeant on discharge in 1868, having done so since 1855.<sup>xxvi</sup> Indeed, a photograph on the Australian Artillery Association website of Henry Green taken prior to his discharge from the RA shows him wearing the rank badge of three chevrons, gun, and crown of a sergeant of artillery during that period.

The rank of Staff Sergeant did not exist in the Artillery when Henry Green joined the NSW, nor, apart from certain trades did it exist until well after Federation for the artillery in Australia. At that time, it was a rank restricted to the departmental corps, such as the Army Hospital Corps, Commissariat and Transport Corps, Army Service Corps, and Corps of Armourers. The title 'staff sergeant' was, however, used as a collective term across the fighting Arms to refer to senior non-commissioned officers (NCO) of all ranks on the headquarters, or staff, of a regiment, brigade, or battalion, and a squadron, battery, or company. In the artillery it encompassed senior NCO ranks such as brigade or battery sergeant-major and

quartermaster sergeant, trumpet-major, assistant instructor in gunnery, paymaster sergeant, hospital sergeant, orderly room sergeant, and various trade related appointments, i.e., wheeler-sergeant, farrier-sergeant, etc. These were colloquially known as brigade or battery staff sergeants; in fact, the term 1st Class or 2nd Class Staff Sergeant appears to have been employed to distinguish between various senior NCO grades.

Until the expansion of the rank of Warrant Officer to the whole of the Army in 1881, brigade and battery staff sergeants wore the same basic badge of rank; four chevrons surmounted by a gun and a crown. Brigade staff sergeants were distinguished from battery staff by additional tracing braid on the collar and cuff decoration of the jacket and a finer quality uniform cloth.

Henry Green, as a drill instructor to the Volunteer artillery in NSW prior to the formation of the NSW, was a senior NCO of the Artillery Branch of the Volunteer Permanent Staff and thus fell into the category of a 'staff sergeant'. In 1876 it is recorded that these men were to wear the uniform of a brigade staff sergeant without tracing braid, but with the three silver chevrons, gun, and crown of a sergeant.<sup>xxvii</sup> The substantive rank of drill instructors of the NSW Volunteer Permanent Staff in 1871 was sergeant. It is possible that later writers have associated the rank badge he wore at the end of his career in the RA, and initially on joining the NSW Military Forces, with its more modern application as the rank distinction of a staff sergeant.<sup>xxviii</sup>

---

***...he only held the rank of sergeant on discharge in 1868,***

---

The title Battery Sergeant-Major denoted a specific rank in 1871; it was not an appointment.<sup>xxix</sup> It remained a senior non-commissioned officers' rank in the Australian colonial defence forces and the Australian Military Forces until late in 1917, at which time it became an appointment held by an individual with the rank of Warrant Officer Class Two, such as it remains today.<sup>xxx</sup>

Henry Green was thus enlisted in the NSW Artillery with the rank of Battery Sergeant-Major. He never held the rank of Staff Sergeant, but by virtue of his appointments on the NSW Volunteer Permanent Staff and then the NSW Artillery until mid-1884, fell into a category of ranks and appointments generally referred to during that period as staff sergeants.



Henry Green well deserves our veneration. While his longevity of service, 46 years on the active list in both the British Army and the NSW Military Forces, was not uncommon in the Australian Colonies it is his contribution to the development of the permanent gunners of NSW that is important. It can have been no easy task to recruit a unit of regular soldiers from scratch and provide basic and technical training in the extended absence of subject matter knowledge throughout the senior leadership team. Regular soldiering to British standards of discipline and conditions of service was not an attractive proposition for the average citizen of the Colonies and the unit struggled to recruit to their authorised establishment. Within the first dozen years of the regiment's existence nearly 400 men deserted, and ten years later the annual rate of desertion was still running at over 11 per cent, comparing unfavourably with the permanent artillery of other Australian colonies.

Nor was there unqualified external support for the corps. The NSWA was pilloried by politicians, the press and the public, the rate of military crime in its ranks was the subject of numerous tabling and discussion in Parliament, and reference to its officers in the press was generally concerned more with slights to reputation than martial ability.

When, however, the call to arms sounded in 1885, and again in 1899, the NSWA and its successor NSW Regiment of RAA demonstrated their capability by providing in each case a trained and fully manned sub-unit for operational service abroad. In South Africa in particular the Regiment's contribution compared favourably with other artillery units of the multinational force of which it formed a part. There is no doubt that considerable credit for development to this standard, particularly during the formative stages of the Regiment, was due to the leadership, technical knowledge, and personal standard of conduct of Henry Green.

## Endnotes

<sup>i</sup> AWM: AWM1; 9/1, [Commonwealth and Pre-Federation records:] a) Nominal roll, NSW Artillery, 1871-1912. Regimental numbers 1-3980 [with gaps]; b) Nominal roll, Royal Australian Garrison Artillery, 2nd Military District, 1915-18. Regimental numbers 1-1858 [with gaps], 1871-1918.

<sup>ii</sup> LTCOL P L Murray, *Historical Record of the New South Wales Regiment of Royal Australian Artillery* (Sydney, 1903), p. 3. Murray's statement at p. 7 that Henry Green's promotion to Warrant Officer occurred

in June 1885 appears to be in error as *The New South Wales Military Force 1887*, corrected to 22 April 1887, gives the date of his warrant as 5 June 1884.

<sup>iii</sup>

<<https://trove.nla.gov.au/newspaper/article/222829678/13286497>>, New South Wales Government Gazette Issue No 945 of 20 November 1896, effective 13 November 1896.

<sup>iv</sup> *Commonwealth of Australia Gazette* Issue No 45 dated 19 September 1902.

<sup>v</sup>

<<https://trove.nla.gov.au/newspaper/article/111033808>>, *Evening News* (Sydney NSW), 30 September 1896.

<sup>vi</sup>

<<https://trove.nla.gov.au/newspaper/article/135772041>>, *Newcastle Morning Herald and Miners' Advocate* (NSW), 24 November 1896, p. 4.

<sup>vii</sup>

Ibid,

p.

4.

<<https://trove.nla.gov.au/newspaper/article/71222015>>, *Australian Town and Country Journal* (Sydney, NSW), 24 August 1895.

<sup>viii</sup>

<<https://trove.nla.gov.au/newspaper/article/108858773>> *Evening News* (Sydney NSW), 17 February 1897. Richmond Cubis, *A History of 'A' Battery NSW Artillery (1871-1899)*, Royal Australian Artillery (1899-1971), Elizabethan Press, Sydney, 1978, p.17.

<sup>ix</sup>

<[https://www.armymuseumnsw.com.au/Henry\\_Green.php](https://www.armymuseumnsw.com.au/Henry_Green.php)> accessed 24 October 2020.

<<https://trove.nla.gov.au/newspaper/article/71222015>>, *Australian Town and Country Journal* (Sydney, NSW), 24 August 1895.

<sup>x</sup><[https://www.artilleryhistory.org/gunners\\_past\\_and\\_present/gunners\\_of\\_renown\\_and\\_gunners\\_tales/gunners\\_of\\_renown/chapter\\_1/documents/bio\\_green\\_henry.pdf](https://www.artilleryhistory.org/gunners_past_and_present/gunners_of_renown_and_gunners_tales/gunners_of_renown/chapter_1/documents/bio_green_henry.pdf)>

<sup>xi</sup> Ibid.

<sup>xii</sup> Described as a Chelsea Pensioner in the NSW *Blue Book*, editions of 1880 to 1883 inclusive relating to the appointment of an instructor to the Cadet Artillery. All British Army pensions were administered and paid by the Royal Hospital Chelsea until 1955, Green being known as an Out-Pensioner

<sup>xiii</sup> *History of the Origin and Formation of the Field Artillery of New South Wales*, no author name given, printed by H Hooper, Paddington, Sydney, 1895, p. 1.

<sup>xiv</sup> In March 1871 the experienced former RA sergeant in charge of such a gun mounting party at Georges Head that included Henry Green was mortally injured when a 96-hundredweight (4.877-tonnes) gun rolled on him. The same techniques and appliances were still in use until after the Second World War.

<sup>xv</sup> In early 1874 two-thirds of the other rank establishment of the battery petitioned the NSW Parliament for permission to resign before the expiration of their contract of enlistment, in part citing their officers' lack of qualifications and the men's subsequent loss of confidence in and respect

for them. See <https://trove.nla.gov.au/newspaper/article/107139226>, *Evening News* (Sydney NSW), 13 March 1874.

xvi

<https://trove.nla.gov.au/newspaper/article/60879614>, *Empire* (Sydney NSW), 30 December 1871.

<sup>xvii</sup> The appointment had been instituted on 1 December 1878 but 1880 is the first year that the Brigade Sergeant Major of the NSW is recorded as holding the position.

<sup>xviii</sup> *New South Wales Government Gazette* Issue No 1078 dated 31 December 1897. A member in possession of the Meritorious Service Medal was obliged to forgo the wearing of the Army Long Service and Good Conduct Medal. It appears that Henry Green continued to wear both awards, probably because the earlier medal related to his RA service, the later medal to service in NSW.

xix

[http://www.bwm.org.au/documents/A\\_Battery\\_History.pdf](http://www.bwm.org.au/documents/A_Battery_History.pdf). The initial 'T' has not been identified although in one modern account it appears as Thomas. All references to this individual, including the New South Wales Gazette notice regarding his promotion to Honorary 2nd Lieutenant, refer simply to Henry Green and there is no evidence of a middle name.

<sup>xx</sup> The term 'corps' is used in accordance with Regulations under the Volunteer Force Regulation Act of 1867, New South Wales, which defined a corps as a united body consisting of two or more batteries or companies formed into a consolidated regiment, as also a battery or company formed separately.

<sup>xxi</sup> See [http://www.samrainc.org/Pdf/Whats\\_In\\_a\\_Number.pdf](http://www.samrainc.org/Pdf/Whats_In_a_Number.pdf) for a fuller description of the systems of soldier numbering used by the Australian Army and its predecessors.

xxii

[https://www.armymuseumnsw.com.au/Henry\\_Green.php](https://www.armymuseumnsw.com.au/Henry_Green.php).

<sup>xxiii</sup> Murray (1903, p. 1). Cubis (1978, p. 17).

xxiv

<https://trove.nla.gov.au/newspaper/article/28418571> > *The Sydney Morning Herald* of 30 March 1871.

xxv

<https://trove.nla.gov.au/newspaper/article/28418571> >, *The Sydney Morning Herald* of 30 March 1871.

<https://trove.nla.gov.au/newspaper/article/135772041> >, *Newcastle Morning Herald and Miners' Advocate* (NSW), 24 November 1896, p. 4.

xxvi

[https://www.armymuseumnsw.com.au/Henry\\_Green.php](https://www.armymuseumnsw.com.au/Henry_Green.php).

<sup>xxvii</sup> NSW *Clothing and Equipment Regulations* 1876, p. 6. The only visual difference between the uniform of a Permanent Staff sergeant drill instructor to the Volunteer Artillery, and a sergeant of the latter corps was a silver embroidered grenade worn on the shoulder straps by the former, and the finer material of his uniform. The Volunteer Artillery sergeants

wore the number of their battery on their shoulder straps.

<sup>xxviii</sup> Until 1881 all senior non-commissioned officers of artillery wore a gun and crown above their three- or four-bar chevrons as appropriate to their rank. In this year the crown was abolished from the badge of rank of sergeants, and the badge of rank of battery staff sergeants became three chevrons with a gun and crown above.

<sup>xxix</sup> *Royal Warrant for the Pay and Promotion, Non-Effective Pay, and Allowances of Her Majesty's British Forces serving elsewhere than in India, Part I – Pay, Division Two – Non-Commissioned Officers and Men, Section III*, editions dated February 3rd, 1866, and 27th September 1870. *The Queen's Regulations and Orders for the Army, Part I*, War Office, 1889, Section VII, para 7.

<sup>xxx</sup> NAA: A1174; 20.21/6146, *The Defence Act 1903-1912 - Regulations and Standing Orders for the Military Forces of the Commonwealth of Australia 1908*, para 144. Military Order 516/1917 of 17 November 1917.



# THE SONG OF THE GUNS

*Captain Gilbert Frankau,  
Adjutant 107th Artillery Brigade,  
Royal Field Artillery, Western Front 1915*

“THE Song of the Guns” was written under what are probably the most remarkable conditions in which a poem has ever been composed. The author, who is now serving in Flanders, was present at the Battle of Loos and during a lull in the fighting—when the gunners who had been sleepless for five nights were resting like tired dogs under their guns—he jotted down the main theme of the poem. After the battle the Artillery Brigade to which he was attached was ordered to Ypres and it was during the long trench warfare in this district, within sight of the ruined tower of Ypres Cathedral, that the poem was finally completed. The last three verses were written at midnight in Brigade Headquarters with the German shells screaming over into the ruined town.

## A Song of the Guns in Flanders

BY GILBERT FRANKAU, R.F.A.

### THE VOICE OF THE SLAVES

*We are the slaves of the guns,  
Serfs to the dominant things;  
Ours are the eyes and the ears,  
And the brains of their messagings.*

Ours are the hands that unleash  
The blind gods that raven by night,  
The lords of the terror at dawn  
When the landmarks are blotted from sight  
By the thick curdled churnings of smoke—  
When the lost trenches crumble and spout  
Into loud roaring fountains of flame;  
Till, their prison walls down, with a shout  
And a cheer, ordered line after line,  
Black specks on the barrage of gray  
That we lift—as they leap—to the clock,  
Our infantry storm to the fray.

These are our masters, the slim  
Grim muzzles that irk in the pit;  
That chafe for the rushing of wheels,  
For the teams plunging madly to bit

As the gunners swing down to unkey,  
For the trails sweeping half-circle-right,  
For the six breech-blocks clashing as one  
To a target viewed clear on the sight—  
Gray masses the shells search and tear  
Into fragments that bunch as they run—  
For the hour of the red battle-harvest  
The dream of the slaves of the gun!

We have bartered our souls to the guns;  
Every fibre of body and brain  
Have we trained to them, chained to them.  
Serfs?

Aye! but proud of the weight of our  
chain—

Of our backs that are bowed to their work-  
ings,

To hide them and guard and disguise—  
Of our ears that are deafened with service,  
Of hands that are scarred, and of eyes  
Grown hawklike with marking their prey—  
Of wings that are slashed as with swords  
When we hover, the turn of a blade  
From the death that is sweet to our lords.

*By the ears and the eyes and the brain,  
By the limbs and the hands and the wings,  
We are slaves to our masters the guns—  
But their slaves are the masters of kings!*

## Headquarters

A league and a league from the trenches,  
from the traversed maze of the lines—  
Where daylong the sniper watches and day-  
long the bullet whines,  
And the cratered earth is in travail with  
mines and with countermines—

Here, where haply some woman dreamed  
(are those her roses that bloom  
In the garden beyond the windows of my lit-  
tered working-room?),  
We have decked the map for our masters as  
a bride is decked for the groom.

Here, on each numbered lettered square—  
cross-road and mound and wire,  
Loophole, redoubt and emplacement, are the  
targets their mouths desire;  
Gay with purples and browns and blues, have  
we traced them their arcs of fire.

And ever the type-keys clatter; and ever our  
keen wires bring  
Word from the watchers a-crouch below,  
word from the watchers a-wing;  
And ever we hear the distant growl of our  
hid guns thundering:



Hear it hardly, and turn again to our maps,  
where the trench-lines crawl,  
Red on the gray and each with a sign for the  
ranging shrapnel's fall—  
Snakes that our masters shall scotch at dawn,  
as is written here on the wall.

For the weeks of our waiting draw to a close  
\* \* \* There is scarcely a leaf  
astir,  
In the garden beyond my windows where the  
twilight shadows blurr  
The blaze of some woman's roses \* \* \*  
"Bombardment orders, sir."

There is shrapnel bursting a mile in front on  
the road that the guns must take:  
(You are nervous, you are thoughtful, you  
are shifting in your seat,  
As you watch the ragged feathers flicker  
orange flame and break)  
But the teams are pulling steady down the  
battered village street.

You have shod them cold, and their coats are  
long, and their bellies gray with the  
mud;  
They have done with gloss and polish, but  
the fighting heart's unbroke;  
We, who saw them hobbling after us down  
white roads flecked with blood,  
Patient, wondering why we left them, till  
we lost them in the smoke:

Who have felt them shiver between our  
knees, when the shells rain black from  
the skies;  
When the bursting terrors find us and the  
lines stampede as one:  
Who have watched the pierced limbs quiver  
and the pain in stricken eyes,—  
Know the worth of humble servants, fool-  
ish—faithful to their guns!

### Gun-Teams

Their rugs are sodden, their heads are down,  
their tails are turned to the storm,  
Would you know them, you that groomed  
them in the sleek fat days of peace—  
When the tiles rang to their pawings in the  
lighted stalls, and warm—  
Now the foul clay cakes on britching strap  
and clogs the quick-release?

The blown rain stings, there is never a star,  
the tracks are rivers of slime.  
(You must harness-up by guesswork with  
a failing torch for light,  
Instep deep in unmade standings, for it's  
active-service time;  
And our resting weeks are over, and we  
move the guns to-night.)

The iron tyres slither, the traces sag; their  
blind hooves stumble and slide;  
They are war-worn, they are weary, soaked  
with sweat and sopped with rain;  
(You must hold them, you must help them,  
swing your lead and centre wide  
Where the greasy granite pavé peters out  
to squelching drain.)

### Eyes in the Air

Our guns are a league behind us, our target  
a mile below,  
And there's never a cloud to blind us from  
the haunts of our lurking foe—  
Sunk pit whence his shrapnel tore us, sup-  
port-trench crest-concealed,  
As clear as the charts before us, his ram-  
parts lie revealed.  
His panicked watchers spy us, a droning  
threat in the void,  
Their whistling shells outfly us—puff upon  
puff, deployed  
Across the green beneath us, across the flank-  
ing gray,  
In fume and fire to sheath us and balk us of  
our prey.  
Below, beyond, above her,  
Their iron web is spun!  
Flicked but unsnared we hover,  
Edged planes against the sun:  
Eyes in the air above his lair,  
The hawks that guide the gun!

No word from earth may reach us, save  
white against the ground,  
The strips outspread to teach us whose ears  
are deaf to sound:

(You must hold them, you must help them,  
swing your lead and centre wide  
Where the greasy granite pavé peters out  
to squelching drain.)



But down the winds that sear us, athwart our  
engine's shriek,  
We send—and know they hear us, the rang-  
ing guns we speak.  
Our visored eyeballs show us their answering  
pennant, broke  
Eight thousand feet below us, a whorl of  
flame stabbed smoke—  
The burst that hangs to guide us, while  
numbed gloved fingers tap  
From wireless key beside us the circles of  
the map.

Line—target—short or over—  
Comes, plain as clock hands run,  
Word from the birds that hover,  
Unblinded, tail to sun—  
Word out of air to range them fair,  
From hawks that guide the gun!

Your flying shells have failed you, your land-  
ward guns are dumb;  
Since earth hath naught availed you, these  
skies be open! Come,  
Where, wild to meet and mate you, flame in  
their beaks for breath,  
Black doves! the white hawks wait you  
on the wind-tossed boughs of death.  
These boughs be cold without you, our hearts  
are hot for this,

These boughs be cold without you, our hearts  
are hot for this,  
Black doves! the white hawks wait you  
on the wind-tossed boughs of death.

### Signals

The hot wax drips from the flares  
On the scrawled pink forms that litter  
The bench where he sits; the glitter  
Of stars is framed by the sand-bags atop of  
the dug-out stairs.  
And the lagging watch hands creep;  
And his cloaked mates murmur in sleep—  
Forms he can wake with a kick—  
And he hears, as he plays with the pressel-  
switch, the strapper receiver click  
On his ear that listens, listens;  
And the candle-flicker glistens  
On the rounded brass of the switch-board  
where the red wires cluster thick.  
Wires from the earth, from the air;  
Wires that whisper and chatter  
At night, when the trench-rats patter  
And nibble among the rations and scuttle  
back to their lair;  
Wires that are never at rest—  
For the linesmen tap them and test,  
And ever they tremble with tone:—  
And he knows from a hundred signals the  
buzzing call of his own,  
The breaks and the vibrant stresses,—  
The Z, and the G, and the Esses,

That call his hand to the answering key and  
his mouth to the microphone.

For always the laid guns fret  
On the words that his mouth shall utter,  
When rifle and maxim stutter  
And the rockets volley to starward from the  
spurting parapet;  
And always his ear must hark  
To the voices out of the dark,—  
For the whisper over the wire,  
From the bombed and the battered trenches  
where the wounded moan in the mire.  
For a sign to waken the thunder  
Which shatters the night in sunder  
With the flash of the leaping muzzles and the  
beat of battery-fire.

### The Observers

Ere the last light that leaps the night has  
hung and shone and died,  
While yet the breast-high fog of dawn is  
swathed about the plain,  
By hedge and track our slaves go back, the  
waning stars for guide—  
Eyes of our mouths, the mists have cleared,  
the guns would speak again!

Faint on the ear that strains to hear, their  
orders trickle down  
“Degrees—twelve—left of zero line—cor-  
rector one three eight—  
Three thousand” . . . Shift our trails and lift  
the muzzles that shall drown  
The rifle's idle chatter when our sendings  
detonate.

Sending or still, these serve our will; the hid-  
den eyes that mark  
From gutted farm, from laddered tree that  
scans the furrowed slope,  
From coigns of slag whose pit-props sag on  
burrowed ways and dark,  
In open trench where sandbags hold the  
steady periscope.

Careless they give while yet they live; the  
dead we tasked too sore  
Bear witness we were naught begrudged of  
riches or of youth;  
Careless they gave, across their grave our  
calling salvos roar,  
And those we maimed come back to us in  
proof our dead speak truth!



Waking, they know the instant foe, the bullets phutting by,

The blurring lens, the sodden map, the wires that leak or break!

Sleeping, they dream of shells that scream adown a sunless sky—

And the splinters patter round them in their dug-outs as they wake.

Not theirs, the wet glad bayonet, the red and racing hour,

The rush that clears the bombing-post with knife and hand grenade;

Not theirs the zest when, steel to breast, the last survivors cower,—

Yet can ye hold the ground ye won, save these be there to aid?

These, that observe the shells far swerve, these of the quiet voice,

That bids "go on," repeats the range, corrects for fuse or line...

Though dour the task their masters ask, what room for thought or choice?

This is ours by right of service, heedless gift of youthful eyne!

*To the loader kneeling 'twixt trail and wheel from the shops where the steam lathes run—*

Theres' a lone mule braying against the line where the mud cakes fetlock deep!

There's a lone soul humming a hint of a song in the barn where the drivers sleep;

And I hear the pash of the orderly's horse as he canters him down the lane—

Another cog in the gun-machine, a link in the selfsame chain.

I am only a cog in a giant machine, but a vital link in the chain;

And the Captain has sent from the wagon-line to fill his wagons again;—

*From wagon-limber to gunpit dump; from loader's forearm at breach,*

*To the working party that melts away when the shrapnel bullets screech.*

So the restless section pulls out once more in column of route from the right,

At the tail of a blood-red afternoon; so the flux of another night

Bears back the wagons we fill at dawn to the sleeping column again...

Cog on cog in the gun-machine, link on link in the chain!

## Ammunition Column

*I am only a cog in a giant machine, a link of an endless chain:—*

*And the rounds are drawn, and the rounds are fired, and the empties return again;*

*Railroad, lorry and limber, battery, column and park;*

*To the shelf where the set fuse waits the breach, from the quay where the shells embark—*

We have watered and fed, and eaten our beef; the long dull day drags by,

As I sit here watching our "Archibalds" strafing an empty sky;

Puff and flash on the far off blue round the speck one guesses the plane—

Smoke and spark of the gun-machine that is fed by the endless chain.

I am only a cog in a giant machine, a little link in the chain,

Waiting a word from the wagon-lines that the guns are hungry again:—

*Column-wagon to battery-wagon, and battery-wagon to gun;*

## The Voice of the Guns

We are the guns, and your masters? Saw ye our flashes?

Heard ye the scream of our shells in the night, and the shuddering crashes?

Saw ye our work by the roadside, the gray wounded lying,

Moaning to God that He made them—the maimed and the dying;

Husbands or sons,  
Fathers or lovers, we break them! We are the guns!

We are the guns and ye serve us! Dare ye grow weary,

Steadfast at night-time at noon-time; or waking when dawn winds blow dreary,

Over the fields and the flats and the reeds of the barrier water

To wait on the hour of our choosing, the minute decided for slaughter?

Swift the clock runs;  
Yea, to the ultimate second. Stand to your guns!

We are the guns and we need you! Here in the timbered

Pits that are screened by the crest and the copse where at dusk ye unlimbered,

*copse where at dusk ye unlimbered*  
*Pits that are screened by the crest and the timbered*

*We are the guns and we need you! Here in*  
*guns!*

*Yea, to the ultimate second. Stand to your*  
*swift the clock runs!*



Pits that one found us—and finding, gave life  
(Did he flinch from the giving?);  
Laboured by moonlight when wraith of the  
dead brooded yet o'er the living,  
Ere, with the sun's  
Rising the sorrowful spirit abandoned its  
guns.

Who but the guns shall avenge him? Strip  
us for action!

Load us and lay to the centremost hair of the  
dial-sight's refraction.

Set your quick hands to our levers to compass  
the sped soul's assoiling;

Brace your taut limbs to the shock when the  
thrust of the barrel recoiling

Deafens and stuns!

Vengeance is ours for our servants: trust  
ye the guns!

Least of our bond-slaves or greatest, grudge  
ye the burden?

Hard is this service of ours which has only  
our service for guerdon:

Grow the limbs lax, and unsteady the hands,  
which aforeside we trusted;

Flawed, the clear crystal of sight; and the  
clean steel of hardihood rusted?

clean steel of hardihood rusted?  
Flawed, the clear crystal of sight; and the  
which aforeside we trusted:  
from the limbs lax, and unsteady the hands'

*Dominant ones.*

*Are we not trued serfs and proven—true to  
our guns?*

*Ye are the guns! Are we worthy! Shall not  
these speak for us,*

*Out of the woods where the torn trees are  
slashed with the vain bolts that seek  
for us,*

*Thunder of batteries firing in unison, swish  
of shell fighting*

*Hissing that rushes to silence and breaks to  
the thud of slighting;*

*Death that outruns*

*Horseman and foot? Are we justified?*

*Answer, O guns!*

Yea! by your works are ye justified—toil  
unrelieved;

Manifold labours, co-ordinate each to the  
sending achieved;

Discipline, not of the fact, but the soul, un-  
remitting, unfeigned;

Tortures unholy (— — — —) maiming,  
known, faced, and disdained;

Courage that shuns

Only foolhardiness; even by these are ye  
worthy your guns!

*Wherefore—and unto ye only—power hath  
been given;*

*Yea! beyond man, over men, over desolate  
cities and riven;*

*Yea! beyond space, over earth and the seas  
and the skies high dominions;*

*Yea! beyond time, over Hell and the fiends  
and the Death-angel's pinions!*

*Vigilant ones,*

*Loose them, and shatter, and spare not. We  
are the guns.*

*Flanders.*

*Winter, 1915.*

# THE RESTORATION OF “THE WERRIBEE GUN”

12-Pounder 8 cwt RBL (Armstrong) Gun serial number 370

*By Allan Sterling, JP. Copyright 2020*

## Background

For many years the Australian War Memorial (AWM) had been interested in acquiring a 4.5 inch howitzer for its collection. The howitzer and 18-pounder gun had been the main weapons of the Australian Field Artillery in World War I. Only two 4.5 inch howitzers were known to exist in Australia, and both were in the collection of the Royal Australian Artillery Historical Company (RAAHC).

The AWM had in its collection the remnants of a 12-pounder Rifled Breech Loading Gun, serial number 370. This gun was one of six purchased by the Victorian Government in 1864 for use by the Victorian Volunteer Artillery. They were replaced by new 12-pounder breech loading guns in 1885 and placed in storage. In 1889 the carriage was slightly modified and the guns were issued to the Victorian Horse

Artillery. Gun 370 was one of the guns used by the Werribee Half Battery between 1889 and 1893. Sometime around 1898, the guns were disposed of and eventually gun 370 was placed on display at Lake Park, Creswick.



**Bill Stuart and Bill Knight, volunteer carpenters with the RAAHC assist with the off-loading of the barrel No 370 at North Head, 2012. Photo: K. Browning**

By 1940 it was in a state of disrepair and handed over to the School of Forestry at Creswick for repair and display. This work was not undertaken and sometime between 1962 and 1964 it came into the possession of a private collector who intended to restore it. Again, the work was not carried out and in 1984 the AWM purchased the gun. They funded a complete set of engineer’s drawings and production of a set of wheels, axle and breech block. Work ceased when they became aware of a fully restored gun, serial number 367, and purchased it.

In 2012 the RAAHC exchanged a 4.5 inch howitzer and limber for gun number 370. The release of gun 370 required Ministerial Approval which was readily given. The AWM received a very significant item of Australian military history and the RAAHC received the remnants of a gun that represented a significant development in artillery - breech loading, rifled barrel firing a conical projectile and with an on-carriage traversing capability – and associated with the Victorian Horse Artillery<sup>1</sup>.

## The Restoration

I had been interested in the future of this gun since 2003 and had originally approached the AWM and Parks Victoria Werribee Park, about the future of the gun and the possibility of returning the gun to Werribee and restoring it. The AWM sent me their curatorial guidelines for the restoration of Armstrong 370, but no further progress could be made at that time as Parks Victoria did not have any areas suitable to conduct a restoration or any personnel. In 2014 while searching for a suitable period gun which could be utilised by the newly formed Werribee Half Battery, I became aware that the RAAHC had gun 370. Their Collection Manager, Kevin Browning, advised me that there were no funds to restore it and whilst they had the volunteers capable of doing the timber work; the timber they had was ironbark and totally unsuitable due to its weight and hardness.

I offered to try to source a suitable timber and secure funding for it. Discussions with various custom timber suppliers revealed that the only timber available in the size required was Golden

Cypress, which is milled in Victoria from old Golden Cypress removed from country properties by Golden Cypress Timber Sales. Kevin provided details of the quantity and dimensions of timber required in July 2015. The cost of such timber would be \$1760. I approached the Royal Australian Artillery Association Victoria and met with LTCOL Jason Cooke and MAJ Neil Hamer (Ret), then secretary and president respectively of the Association, with the restoration proposal. This was taken to their committee and a \$2000 grant was approved.

In August 2015, my wife Maryanne and I met with LTCOL Jason Cooke at the Werribee RSL. At this meeting LTCOL Cooke, in his role as a Director of the RAAHC, offered me appointment as the project manager for the restoration. I was initially hesitant as the restoration was being carried out in Sydney, but he assured me that as it was a management role it could be done from Melbourne by way of e-mail and telephone. After some consideration and the support of my wife, I advised him the next day of my acceptance of his nomination and I was duly appointed by the Board.



**Chainsaw wood shaping completed. Note the original ironbark beam which was to be used in the background, Sept. 2016**

Significant additional funds were still required. Quite a few metal components had to be fabricated, the most significant and costly of these being the trail plates and towing eye. There



Arrival of the timber at North Head, February 2016. In the background note the barrel, axle, and one of the wheels. Photo: K. Browning

was a problem finding a manufacturer willing and capable of doing the work and at a reasonable price. Commercial enquiries were met with an inability to do the job, no time or interest in doing so or extremely expensive quotes of tens of thousands of dollars. My enquiries with various blacksmiths in Melbourne led me to Stephen Nicoll, recommended as the only blacksmith capable of doing the job, as he had access to a steam hammer which he had restored and electrified. Steve agreed to take on the job and at an affordable price.

All up it was estimated that we required a \$10,000 budget to complete the restoration and so I sought an additional \$8000 through the Federal Governments Building Stronger Communities Grant scheme with the full support of local Lalor Federal member Joanne Ryan and her office in April 2016. This grant application was successful, the RAAHC being notified in June 2016 and this provided sufficient funds to complete the structural work. The RAAHC Board had previously agreed to a request to provide the gun on long term loan to the Werribee Half Battery which was critical to the relevance and success of the grant. The gun would remain on loan until required for display at the proposed Australian Army Artillery Museum at Puckapunyal.

The Golden Cypress timber had been cut to the size specified and delivered direct to North Head, Sydney in February 2016. With the support of the Sydney Harbour Federation Trust, volunteers at North Head then commenced work. All the timber work had to be rebuilt, except wheels, and a quantity of the metal pieces fabricated. The first challenge facing chief carpenter Bill Stuart was how to cut and shape the huge 3 metre long Cypress beam. The restoration of the Hastings 40 pounder Armstrong had used a huge bandsaw to do the shaping, however my enquiries were unable to locate any company with a saw capable of doing the job, including boatbuilding companies in





**Trail plates being fitted, Nov. 2017.**

Tasmania. Bill Stuart suggested using somebody very experienced with wood shaping using a chainsaw. Whilst initially aghast at the suggestion, I recall having seen carvings done with chainsaws. Bill knew such an expert chainsaw exponent, David Taylor, who was quite confident of being able to perform the work required and was duly engaged to do so. Once reduced to the general shape the accurate finish could be obtained using electric planes and other hand tools.

In Melbourne, blacksmith Steve produced all of the blacksmith forged pieces required, the most significant of those being the trail plates and towing eye. Steve found this quite a challenge due to the large size and weight of the pieces but with perseverance and determination he produced the required pieces which were fitted and came together beautifully on the wooden trail. Producing the trail plates was even more challenging because he was often working from templates sent down by Bill. With respect to other pieces and the general construction of the gun carriage, it soon became apparent the engineer drawings were not accurate but a visit by Kevin and Bill to the AWM allowed necessary checks to be made. In other instances, reference had to be made to sections of the original plans which we had, to resolve the inaccuracies, inconsistencies and contradictions in the engineer drawings supplied to the AWM.



**Gun carriage takes shape, August 2018**

A simple and obvious example here relates to the traversing lever. There is a forked section at one end which is meant to fit over the azimuth nut which moves along the traversing screw. The width of the fork into which the azimuth nut fitted was less than the dimensions of the nut. Reference to the original plans confirmed what was obvious and consistent with the dimensions of the azimuth traversing nut.

Other volunteers at North Head assisted with the metal work for example the axle made for the AWM was too long and had to be reduced, using a cut and shunt method. Bill also found some spare time at home to produce all of the leather work and the bucket. He also roughed out the trail spike using a piece of naturally shaped fig timber, which Steve Nicoll completed in Melbourne. The engineering team at North Head also manufactured all the non-blacksmithing structural steel work required. It is not possible here to clearly show the expertise all these volunteers have provided but the tolerances they had to work to were very fine in many places and they met everyone. Special credit and thanks must be given to Bill Stuart, the carpenter craftsmen with Steve Hassett, engineer, who built the carriage and to blacksmith Stephen Nicoll for the major pieces he crafted in Victoria.



**View of the breech, elevation and traversing mechanism with azimuth nut.**

There was pressure on Bill Stuart and the team in Sydney to complete the structural restoration as the shed being used for the work was required by the Sydney Harbour Federation Trust. The building was supposed to be vacated by the end of 2018, however we were able to gain an extension to allow the structural work to be completed. As project manager, I was aware of this situation and looked for a site in Werribee to store the gun and complete the surface finishing. In December 2018 I became aware that the Werribee RSL subbranch had a storage facility and approached the memorabilia officer Merv Clifton on this matter. He took this to the committee and the committee consented to 370 being stored there.



**Steve Hassett and Bill Stuart fit the barrel to check their work, Sept. 2018**

The next challenge was to transport the Armstrong to Melbourne. The Fox Family Foundation had been major supporters of the RAAHC 18 pounder project, so I made a formal approach to them to assist with transport. Within 24 hours of my written request being received, it went before Lindsay Fox and the following day I received a call from the State Transport Manager saying that Linfox transport would provide transport for the gun from Sydney pro bono. We are very thankful to Lindsay Fox, the Fox Family Group and Linfox transport for their support.

On 29 April 2019 a suitable heavy rigid Linfox (Bevchain) truck with a large rear lifting platform was dispatched to Sydney and the following day the Werribee Gun was loaded onto the truck and safely secured for transport back to Werribee. On 1 May the Werribee gun

arrived back in Werribee after an absence of 126 years.



**370 safely stowed arrives in Werribee, 1 May 2019**



**370 safely unloaded.**

It was now the task of the Werribee Half Battery Living History Group under the guidance of the Project Manager, to complete the restoration which meant removing the paint from the wheels, staining and varnishing the carriage and preserving the metal work.

The first step in finishing the carriage was to remove the pink primer from the wheels. This was a massive and difficult job as there was a thick layer of pink primer. Initially after using a lot of paint stripper with wire brushes and scrapers the bulk of primer was removed. The next step was sanding the remaining primer off using orbital and detail sanders. The lesson learnt here for everyone is never ever paint any wooden surface that might conceivably be varnished and stained at some stage in the future! The wheels and hubs were found to be made of Jarrah, with Spotted Gum used for the spokes. This meant that the overall finish of the gun would be Jarrah stained. Once the sanding was completed the wheels and hubs needed to be





**WHB members Ben Cook, Carl Sarelius, and Sam Jaeger hard at work on paint stripping. Steve Nicoll at the breech**

stained in Jarrah to cover the primer remaining in the grain of the wood which is impossible to remove without removing a large amount of timber. During this time blacksmith Steve Nichol forged the rammer cleat on site with his portable forge and anvil to exactly fit the contour of the rear of the trail. The staining and varnishing were completed by mid-November 2019 and in late November the Werribee Half Battery attended the venue for promotional pictures with the gun. However, by this time restoration funds were exhausted and additional funding estimated at \$4000 was still required to complete the project, significant items remaining being the trail spike, drag shoe, commemorative plaque(s), completion of the spare tangent sight and barrel finishing costs.



**Steve Nicoll at his anvil.**

The next challenge was the improvement of external appearance of the barrel and cleaning

the interior. The main problem with the external barrel finishing was an extremely inconsistent surface. Part of the patina was the grey appearance of aged iron; other sections were rusted; there were significant dings and pitting and other sections had a black appearance which was either old paint or some type of blueing. It is very difficult to get uniform satisfactory results with such an inconsistent surface. Our first attempt was to use a rust converter, which in theory and in testing, converted rust to a black phosphate finish. However, when we attempted this it was not at all successful, probably due to the condition of the surface or the fact that treatment is designed for steel not iron. Ideally, we could have gone for a browned finish but with the variability of the surface the whole



**Michael and Roman Absolon with Allan Sterling at the completion of the staining, 5 Nov 2019**

barrel would have to be removed, cleaned and then browned. We did not have the lifting facilities to remove the barrel from the carriage and even after cleaning and browning, there was no guarantee that the process would be successful. It would also have added significant expense to the restoration. The only viable alternative was to paint the barrel in flat or satin black. The Deniliquin Armstrong Gun number 368, one of its sisters, has its barrel painted and presents well. The Australian War Memorial's gun number 367 has a pleasing browned finish but was in very good condition to start with. Painting, however, presented a major problem. Spray-painting is the ideal way to get a good finish but as we could not remove the barrel from the carriage the risk of overspray onto an



already finished gun carriage is great and so was not a viable way to go. Matt Heddle, an artilleryist from the Geelong Military Re-enactment Group suggested we look at stove paint, which not only is high temperature resistant, important for a barrel which may be fired, but apparently can be applied successfully with a brush. Online research revealed that there was a pot belly stove paint available which will brush on and not leave brushstrokes. Some of this American manufactured, toluene-based paint, was obtained, experimented with and found to produce excellent results. A small section of the barrel was tested and very pleasing results were obtained. The decision being made, the barrel was painted over two sessions with excellent results. In performing such a paint job, it is also important it is done on cool days, using the best quality brushes available. A sponge was used to push the paint sparingly into those areas where impressions were to be found, for example the trunnion lettering and the coat of arms on the top of the barrel. The breech screw and hammer were not painted as they already had a suitable finish.



**Presentation ready, rear view, 8 July 2020**



**James Henderson and Benjamin Casey demonstrate the use of the axle seats**

The barrel interior was in extremely poor condition. A Melbourne brush manufacturer was located who advised on and produced a custom steel chimney flue brush of the correct diameter. This resembled an overgrown version of the normal coiled wire brush one would use in a rifle. We also made disposable lambswool covers which could be used to mop out the barrel. Our first attempts at using the wire brush bought out a mass of flaking rusted iron. Gradually after repeated runs and a lot of WD 40, the barrel has cleaned out fairly well. My thanks to Michael and Roman Absolon for their

persistence and expertise in this operation. The rifling is generally intact. There is one section of the barrel where it is obvious that paper or other material had been lodged while it was on display in the park and water had accumulated there resulting in significant pitting and the destruction of the rifling in that area. However, the barrel will be quite safe for blank firing.

At the time of writing in late August 2020, the next challenge is to make the gun available for public display and utilisation by the Werribee Half Battery. The most appropriate location for display is Werribee Park, ideally the farm area where suitable carriage sheds exist. This is in an area immediately above the Werribee Golf Course originally called Military Flat, where artillery and small arms training was carried out by the Half Battery in the 1890s. This matter will be subject to discussions with Parks Victoria.

It is intended that the Werribee Gun will be blank firing and can be deployed by the Werribee Half Battery for ceremonial and training purposes. Blank firing requires the construction of a custom powder cartridge which has already been produced and a mechanical ignition system, yet to be produced, as friction tubes are not available.

When the Corona virus situation is resolved we look forward to officially unveiling the Werribee Gun.

My sincere thanks as Project Manager, to all those involved in realising the long-awaited restoration of this significant piece of Australia's artillery history.



Presentation ready, front view, 8 July 2020

## Technical details

Type: Armstrong 12 pounder rifled breech loading (RBL) field gun

Model: 1859

Manufacture: Royal Gun Factory, England, 1864

Serial number: 370

Calibre: 76 mm ( 3 inch)

Markings: Crest of Queen Victoria and weight forward of the breech, serial number, manufacturer and year on the left trunnion, Marshall's Iron on the muzzle

Rifling: 38 lands

Twist of rifling: 1 in 38 calibres

Weight: Barrel –432kg (8cwt 2 qtrs), carriage – 610kg (12cwt)

Barrel length: 1829mm (72 inch)

Maximum range: 3050m (3340 yds)

Elevation: 10 degrees (Maximum)

Traverse: 2.5 degrees left or right

Muzzle velocity: 378 m/s (1240 ft/s)

Projectile weight: 5.4kg (12lb)

Rate of fire: Approx. 1 round/min

This type of gun was:

- the first wrought iron gun used in British service
- the first breech loading artillery used in British service
- the first rifled artillery used in British service

The barrel is rifled and the gun has an accurate range of 1800 m (2000 yards). Loading is through the screw breech with a projectile and cartridge. The breech is closed by the insertion of the vent piece and then sealed by winding in the screw, which locks the mitred faces of the vent piece and breech recess. It was fired using a friction tube inserted into a touch hole

in the vent piece.

## The Gun Detachment (Gun Crew)

As laid down in the Artillerist's Manual 11th Edition 1868<sup>2</sup>, nine active members are required to operate the gun in the field. The original Werribee Half Battery used a seven-man gun detachment, categorised as active numbers with additional members being three horse holders and three drivers<sup>3</sup>. However, the gun could be operated with the reduced detachment with the Manual also specifying the duties carried out by four, three, and as little as two active members. Certainly, once the gun is in position it can effectively, though slowly be operated by two members. The contemporary Werribee Half Battery will use a four-man detachment. The gun can effectively be moved by four-men, but is quite difficult to manoeuvre due to its weight with less than four men.

## A brief history of the Werribee gun and Victoria's Armstrong guns by Kevin Browning, OAM

The gun was designed by the British manufacturer W A Armstrong and entered service with the Royal Artillery in 1859. Victoria ordered six of these guns in 1861 and these were given to the Royal Artillery in 1863 for use in New Zealand. Replacements were ordered and arrived in January 1865 and used by the Metropolitan Artillery Corps of the Victorian

Volunteer Artillery. In May 1880 twelve members of the Permanent Victorian Artillery under the command of Captain Anderson and a 12-pounder 8 cwt RBL gun were dispatched by special train from Melbourne to Glenrowan<sup>4</sup>. It was intended to use the gun to blow down Jones' hotel if the Kelly Gang did not surrender. Before they arrived the siege was over and the train was stopped at Seymour and returned to Melbourne.

In 1885 the Victorian Government purchased new 12-pounder breech loading guns and the old RBL guns were placed in storage. In February 1889 Andrew Chirnside, a wealthy landowner, offered to contribute to a half battery on similar grounds to the Nordenfelt Battery raised by Sir William Clarke, Bt in 1884. The Government decided to combine the two half batteries, Clarke's Rupertswood half battery and Chirnside's Werribee Park half battery became the Right Half Battery and Left Half Battery of the Victorian Horse Artillery. The Werribee Half Battery was commanded by Andrew's youngest son Lt (later Capt.) Percy Chirnside. Each half battery was provided with two (later three) old 12-pounder RBL guns which the Government promised to replace with more suitable guns as soon as these could be identified.

Andrew Chirnside died in April 1890 and with the economic downturn of the 1890s his son George wrote to the Government in December 1892 seeking to be relieved from his father's commitment. Consequently, the Werribee Half Battery was disbanded on 1 March 1893. Following the death of Sir William Clarke in May 1897 his son, Sir Rupert Clarke spoke with the Minister of Defence regarding the maintenance of the battery. As the Government was not prepared to incur the cost of supplying modern guns he announced he intended to discontinue his family's contribution to the upkeep of the battery and subsequently the Government disbanded the unit from 30 June 1897. In October 1897, in recognition of the contribution Sir William Clarke had made to the defence of Victoria, the Government presented to Lady Clarke two of the 12-pounder guns. Two other guns were in poor condition and it is

assumed the other two found their way to the Chirnside family.

**Photos credits:** Unless otherwise credited, all photos at North Head compliments Peter Lawrence. All Werribee pictures by Allan Sterling.

**Acknowledgements:** Kevin Browning, OAM for input and proof-reading this article.

#### **Notes and References**

- 1: Background section by Kevin Browning, OAM
- 2: Artillerist's Manual and British Soldiers Compendium, Major F.A. Griffiths, London 11th Edition 1868
- 3: The Galloping Guns of Rupertswood and Werribee Park, Lindsay C. Cox, Coonans Hill Press, 1986
- 4: Sister gun number 367, central exhibit in the Colonial section of the AWM



# TARGET TANK!

THE DEVELOPMENT OF ANTI-TANK ARTILLERY TACTICS WITHIN THE AUSTRALIAN IMPERIAL FORCE AND THE GERMAN ARMY DURING THE GREAT WAR

*Keith Glyde*

## Part One: The Somme to Arras, 1916 to 1917

Two years after the commencement of the Great War the British introduced a new weapon system onto the battlefield: the tank, an armoured, self-propelled, tracked cross country vehicle armed with machine guns and light artillery, designed to assist the advancing infantry to overcome many of the obstacles endemic to trench warfare. Thus began the race that still continues today, to develop effective counter measures against the armoured fighting vehicle.

Development of practical measures for the defeat of armour plate was of course nothing new at that time; after all it had preoccupied the attention of the navies of the world for over half a century prior to the appearance of the tank. Despite the introduction of specialised anti-tank weapons and man-made obstacles it was, however, the field gun that became the predominant anti-tank weapon on both sides during the Great War.

There has been little recognition of our Regiment's contribution to the battle against the tank although extensive operational experience in the role was gained during the Second World War, and it remained a specialist branch of the RAA until 1952. Even less has been recorded of the anti-tank role played by the field artillery of the Australian Imperial Force (AIF) during the Great War.

Improvisation, innovation, and experiment in organization and equipment were hallmarks of the Australian approach to anti-tank defence during the Great War and by the time of the Amiens offensive anti-tank guns were being incorporated in the consolidation of objectives immediately after they were taken. Ironically, as Australian anti-tank measures reached their peak during this period, the German tank threat revealed itself as inconsequential. On the other hand, faced with overwhelming numbers of Allied tanks, the German army was forced to divert significant quantities of its offensive

support artillery to a direct-fire anti-tank role. In the process, however, they developed increasingly effective anti-tank tactics, and at the time of the Armistice they were in the process of introducing the world's first dedicated anti-tank gun to the Western Front.

The aim of this article is to record the experience of the AIF in employing artillery in an anti-tank role during the Great War within the context of overall British Army doctrine and threat assessment, and the comparative development of anti-tank artillery tactics in the German Army, primarily as they were encountered in sectors facing Australian formations.

### Prologue

At 0555 on the morning of 25 September 1918 the SOS signal, three red rockets, went up on the front of the 30th American Division, which had taken over from the 1st Australian Division (1 Aust Div) in the sector opposite Bellicourt, France, less than 24 hours previously. The artillery of the Australian Corps responded, firing defensive barrage fire, known as SOS tasks, on pre-determined points in front of the Allied line.<sup>i</sup> At 0602 the Australian artillery liaison officer with the American infantry battalion on the right of the sector reported that the Germans had broken through and were using tanks.<sup>ii</sup> All of the units of the artillery group covering this particular sector, consisting of the two field artillery brigades of the 1st Australian Division and two brigades of the Royal Field Artillery (RFA), began firing SOS tasks. Following confirmation of tanks from the same source at 0615 the 3rd Battery, Australian Field Artillery (3 Bty AFA), was ordered to move one gun up to the ridge in front of the gun position to engage them. The wagon lines of the 1st Australian Field Artillery Brigade (1 AFA Bde) were stood-to, and the gun teams of the 3rd Battery were ordered up to the gun position.<sup>iii</sup>

It turned out, however, to be a false alarm generated by the penetration of the American front-line outposts by a German raiding party.<sup>iv</sup> A report that there were in fact no tanks was received at 0625, and the brigade's wagon lines were stood down. The Australian artillery response to the report of tank attack by firing the defensive barrage on SOS lines through which the tanks would have to pass, running guns forward to positions in which they could engage tanks by direct fire, and the redeployment of guns to engage tanks that had broken into the defensive position was nonetheless in accordance with established British anti-tank doctrine. The anti-tank tactics employed by the

Australian Corps at Bellicourt in late 1918 had, however, been some time in their development, in fact the first attacks utilising tanks and the earliest deployments of field artillery in the anti-tank role by the AIF had occurred quite coincidentally some 30 kilometres northwest of Bellicourt two years previously.

### **The Battle of Flers-Courcelette and its aftermath**

British tanks made their debut during the battle of Flers-Courcelette conducted between 15 and 22 September 1916. It is stated that ten, or over 40% of those that eventually crossed the start line on the first day, were knocked out by German artillery.<sup>v</sup> Members of the 5th Bavarian Field Artillery Regiment (5 Bav FAR) for instance claimed they hit two within 200 metres of their gun position.<sup>vi</sup> There had been no prior knowledge of tanks and the guns were deployed in their normal indirect fire role.

In an ironic twist, on 25 September 1916 the 13th Battery, New Zealand Field Artillery, manned two German 7.7-cm field guns captured on 15 September and fired eighty rounds at 700 metres range at an abandoned British tank in the German lines that was thought to have been converted into a strongpoint, scoring many direct hits.<sup>vii</sup>



**Figure 1. A British Mark I 'Male' tank knocked out during the final operations of the Somme battles of 1916 and photographed in April 1917. Similar 6-pounder tank guns were salvaged from derelict tanks by the 4th Australian Anti-tank Battery in May 1918 and mounted on improvised platforms as anti-tank guns. (AWM Collection H02120)**

There is no doubt that the tactical success of the battle of Flers-Courcelette and subsequent final operations of the Somme offensive during the autumn of 1916 owed much to the support given by those tanks that did get forward. It is recorded for instance that in a sector held by a battalion of

Reserve Infantry Regiment No 238 (RIR 238), its survivors readily complied with their battalion commander's order to surrender when they were taken in the rear by a single tank.<sup>viii</sup> On the other hand, immobilised tanks were often assaulted by infantry who clambered onto the superstructure, fired into vision slits and gun apertures, and used grenades against them. Several tanks were penetrated by armour-piercing (AP) small-arms projectiles, which at that stage of the war were issued on a limited scale for firing at loophole plates.

The morale of the German infantry was shaken by the encounter; the term '*Tankschrecken*', 'tank-fright' or 'tank-horror', entered the front-line soldier's vocabulary. To counter the damage to morale German soldiers were told that tanks were an English 'fad' and were harmless.<sup>ix</sup> Some prisoner-of-war (POW) stated that although tanks were the subject of much discussion amongst the troops, they were not feared because they generally ditched very easily and rarely reached their objectives.<sup>x</sup> The German supreme command, *Oberste Heeresleitung* (OHL), was equally dismissive of the effect of the new weapon, believing that it could be defeated by the development of effective tactics utilising existing technology.<sup>xi</sup> This view, although shaken by Cambrai in November 1917, would persist until as late as August 1918.

Such, however, was the desire by OHL to obtain examples of tanks for examination, and to provide an incentive for the German soldier to stand and fight them, that prize money in the region of 500 Marks was offered to any unit or sub-unit that knocked one out, to be used as funds for activities such as the purchase of canteen goods, for prizes at unit sporting events, or for other festivities.<sup>xii</sup>

The earliest noted reference to anti-tank measures implemented by the Germans was an order for the immediate cutting of deep ditches in roads leading into the German lines from Allied-held areas.<sup>xiii</sup> Infantry were told that they could not resist tanks and in the event of such an attack they were to take cover in the traverses and let the artillery deal with them after they had passed over the trenches.<sup>xiv</sup> Machine gunners were taught to work around the flanks of the tank and keep it under continuous fire in the event that it broke down or became ditched, in the hope that it could be captured.<sup>xv</sup> Prisoners later stated, however, that machine gun fire was ordered not to be used against tanks in future because it was considered useless.<sup>xvi</sup>

By the end of 1916, infantry anti-tank tactics utilising dummy tanks were being taught in schools behind the German lines.<sup>xxvii</sup> Men were trained to use the dead angles of the tank to bomb the crew immediately they opened the doors or hatches, and special instruction was given in the use of a charge improvised by wiring the heads of several stick grenades around another stick grenade complete with its handle.

Infantry weapons and tactics were, however, considered by the German army to be subsidiary to artillery in the anti-tank role.

**"...the enemy of the Tank is the gun"<sup>xxviii</sup>**

Both the Germans and the British rapidly reached the conclusion that artillery was the most effective means of defence against the tank. The earliest steps in this direction by both belligerents appear to have simply been an extension to their already established practice of deploying advanced field guns in a direct-fire role for infantry support and counter-penetration.

In the German army, doctrine prior to the Great War called for the closest support of the infantry by the field artillery.<sup>xxix</sup> As early as January 1915 a German infantryman noted that the artillery was still in an advanced position just behind the line, and that a field gun was even incorporated in the front line in his sector, rather inadequately concealed under tarpaulins.<sup>xxx</sup> An officer of *Landwehr* FAR 15 recorded in his diary in December 1915 that a gun of his battery was deployed well forward in support of the infantry.<sup>xxxi</sup> In early January 1917 the same writer reported that he had inspected a gun of his battery emplaced as an anti-tank gun near Peronne, south of the I. ANZAC Corps sector, noting that one anti-tank gun was now emplaced in each sector and was only to be fired when tanks were attacking.<sup>xxxi</sup>

The contemporary British doctrine publication, *Field Artillery Training 1914*, reserved reference to the deployment of sections or single guns in the infantry firing line to fighting in wooded areas but the practice of including the use of single guns in advanced positions in the front line had begun by the time the Australian divisions arrived on the Western Front in late March 1916.<sup>xxxi</sup> Deployment of guns in a direct-fire role in support of infantry was not, however, a new experience for the Australian gunners. The 7 Bty AFA, firing shrapnel shell fused at zero, broke up Turkish infantry attacks at Gallipoli over 26/27 April 1915, and a gun of 6 Bty AFA was pushed forward by hand to 200 metres behind the front-line on the night of

22/23 July 1916 to enfilade German positions during the attack on Pozieres by 1 Aust Div.<sup>xxiv</sup>

There is some evidence that additional guns were already being employed by I. ANZAC Corps in 1916 to supplement the normal field artillery organisation; for instance the Commanding Officer (CO) 3 AFA Bde recorded selecting positions for 15-pounder (15-pr) guns deployed as auxiliary armament as early as May.<sup>xxv</sup> The purpose of these guns was not identified and they did not rate further mention in the brigade war diary or that of Headquarters 1st Australian Divisional Artillery (HQ 1 Aust Div Arty).

In mid-October 1916 a mobile section equipped with Breech Loading Converted (BLC) 15-pr guns was temporarily formed from members of 13 AFA Bde.<sup>xxvi</sup> The actual role of this section is not stated, although it fired a small allotment of shrapnel in support of a raid on the enemy trenches on the night of 20 October. It might be concluded that they were specifically intended for a counter-penetration role against both infantry and tanks, as at the end of October 1916 General Headquarters (GHQ) advised HQ Second Army, under command of which I. and II. ANZAC Corps were then serving, that expenditure of ammunition from BLC 15-pr guns allotted for close defence of localities should not be resorted to except in the event of hostile attack.<sup>xxvii</sup> This sub-unit was, however, dissolved on 1 November 1916 and its guns handed over to the 5th Australian Divisional Ammunition Column.

On 5 October 1916 OHL directed that two trench gun detachments and an infantry gun battery equipped with 3.7-cm guns were to be sent to the Somme front to engage tanks at point-blank ranges, although as late as the end of November 1916 interrogation of German artillery POW revealed that none had yet been seen.<sup>xxviii</sup> These guns had been constructed by utilising the barrels of obsolescent naval and fortress revolver cannon, and were in service from 1915 on a fixed mounting as a trench gun, or on a wheeled carriage as an infantry gun for accompanying an assault.<sup>xxix</sup> In early December 1916, I. ANZAC Corps reported the presence of a suspected light gun in the rear of a trench facing their sector, although its exact location could not be determined.<sup>xxx</sup>

Similar measures had been exercising the minds of the British staff. On 11 November 1916 HQ Fourth Army, under which I. ANZAC Corps was now serving, asked GHQ for the allotment of twelve French 37-mm guns and their



ammunition. They considered these guns would be suitable for defence against tanks if the Germans adopted this method of warfare, recognising the difficulty in the current state of the battlefield in moving forward, or maintaining, field guns in advanced positions.<sup>xxxii</sup> GHQ advised Fourth Army on 14 November, however, that it had been definitely decided not to adopt 37-mm guns.<sup>xxxiii</sup>

Both the initial request and the GHQ response suggest that the subject of a suitable gun for a direct-fire defensive role had previously been under discussion at the highest staff levels, and confirm that the use of advanced close defence guns by British field artillery was already an established tactic. The tank was just a new form of target!

### The first Australian anti-tank gun deployments

The earliest reference to the deployment of Australian guns in a specific anti-tank role occurs in the war diary of 24 AFA Bde, in the left divisional sector of the I. ANZAC Corps front at Gueudecourt, France. On 3 December 1916 this unit recorded that two forward gun positions had been selected, and were being prepared for use in the event of tank attack.<sup>xxxiiii</sup>

Two weeks later the CO 25 AFA Bde recorded carrying out a reconnaissance for the selection of a suitable position for an anti-tank gun in the right divisional sector of the front held by I. ANZAC Corps, the first use of the term 'anti-tank' noted in Australian artillery war diaries.<sup>xxxv</sup> He reported that no position fulfilled ideal conditions for anti-tank defence because the infantry trenches were on the forward slope of the next rise, but tanks could be taken under direct fire as they came over the ridge. Several days later he reported that the position had been selected, and at the beginning of January 1917 that it was almost ready for occupation. The type of gun to be installed in these positions is not stated, but it is clear that the policy at this time in I. ANZAC Corps was to deploy Quick-Firing (QF) 18-pr guns from field batteries in the line for anti-tank work.

In evidence that these deployments were part of a co-ordinated defence scheme and not simply local initiatives, HQ 4 Aust Div Arty ordered on 11 January 1917 that the 'tank' gun of 11 AFA Bde was to be taken over by 46 Bty AFA on relief by the 12 AFA Bde; the instruction that this battery was to hand over one of its guns to the outgoing 43 AFA Bty in exchange suggests that the gun was emplaced where it could not be extricated without compromising its position,

and was simply taken over in situ by the incoming unit.<sup>xxxvi</sup> Nearly two weeks later 38 Bty AFA was ordered to deploy two forward guns, and 43 Bty AFA, one forward gun.<sup>xxxvii</sup> In the right division sector, the war diary of 13 AFA Bde recorded their CO making a reconnaissance for the selection of a position for an anti-tank gun at the end of January 1917.<sup>xxxviii</sup> Construction of a gun-pit at the selected position commenced on 7 February, but ceased prior to the end of that month, apparently without being completed.<sup>xxxix</sup>

The understanding by Australian artillery officers of the requirements for effective siting of guns for anti-tank defence, the co-ordination of deployments of forward guns by divisional artillery headquarters, and its occurrence in both divisional sectors of the I. ANZAC Corps front over the same period suggests that gun defence against tanks had become part of the normal corps defensive policy by at least the beginning of December 1916. Nor was this policy restricted to I. ANZAC Corps. When 1 Aust Div took over portion of the line from the neighbouring III. Corps at the end of January 1917, its 5 Bty AFA inherited the 'tank' gun of A Bty, 250 Bde RFA, of the British Army's 50 (Northumbrian) Div.<sup>xxxix</sup>



**Figure 2. A 7.6-cm *minewerfer*, or 'mine-thrower', on a new model carriage incorporating a trail and spade that allowed flat trajectory fire for the engagement of tanks. This photograph, donated to the Australian War Memorial by the German War Museum, is captioned October 1918. The casual attitude of the onlookers, and the lack of steel helmets and camouflage, suggests that the photograph was taken well behind the front-line, possibly at a school. (AWM Collection H13454)**

The most intriguing aspect of the employment of Australian field guns in an anti-tank role between December 1916 and March 1917 is the absence of a clearly defined threat, indeed the earliest deployments were undertaken prior to

the existence of a German tank construction program becoming known. Interrogation of German POW and analysis of captured documents appearing in intelligence summaries issued during this period by both I. and II. ANZAC Corps, whilst highlighting developments in German anti-tank measures, make no mention of German tanks, reflecting a general deficit of information on the subject across the British forces on the Western Front. It can only be concluded that GHQ recognised the potential threat posed by tanks if the Germans had also been working on this form of weapon, and were proactive in instigating counter measures simply as a matter of prudence.

Concerns that the Germans would reciprocate with tanks were held by GHQ almost as soon as the British themselves employed the technology. On 1 October 1916 the Brigadier-General General Staff (Intelligence) at GHQ wrote to the Director of Military Intelligence at the War Office expressing this very view, and seeking assistance from other intelligence agencies in gathering information on the subject.<sup>xi</sup> As a result, by mid December 1916 the British had become aware that the Germans were taking steps to build tanks.<sup>xii</sup> In fact the German War Ministry had ordered work to commence on tank design on 13 November 1916. Design work was completed in only four weeks, the first order was placed at the end of December 1916, and a wooden mock-up of the vehicle was demonstrated on 6 January 1917.<sup>xiii</sup> It would be another year, however, before the products of this program became operational.

Nevertheless, by the end of February 1917 reference to measures being taken for anti-tank defence had virtually disappeared from Australian artillery unit war diaries, a hiatus that would persist into 1918. The reasons for this were two-fold: firstly, it was apparent that Germany had not yet acquired an operational tank capability, and secondly, their forces in the sectors fronting the Australian divisions had clearly adopted a defensive posture. In fact a phased withdrawal of these forces eastwards to a prepared defensive position known generally to the Allies as the Hindenburg Line commenced at the end of this month.

On the other hand the development of anti-tank tactics in the German army entered a new phase from early 1917, focussing primarily on gun defence.

### **The German Close-Combat Batteries**

In early February 1917 interrogation of German POW revealed that a new lightened field gun

was to be introduced to deal with tanks. It was to be emplaced just behind the front-line and would engage tanks with direct fire.<sup>xliii</sup> Simultaneously there were reports that the Germans were forming a new series of infantry trench batteries, and that these were shortly to appear at the front specifically for action against tanks.<sup>xliiv</sup> By late March 1917 intelligence summaries had correctly identified these new units as *Nahkampf-batterien*, or close-combat batteries, the first of which had begun to appear in the line on the Western Front in early March 1917.<sup>xliiv</sup>

The raising of fifty of these batteries had been authorised by the Chief of the General Staff of the Field Army on 10 January 1917.<sup>xlivi</sup> They were formed from about 24 January 1917 onwards, consisting of personnel selected from the field artillery with an emphasis on their ability to function independently in isolated gun positions in the forward battle zone.<sup>xlii</sup> These batteries were equipped with six lightened 7.7-cm FK96 n/A field guns, modified primarily by removing the lower portion of the shield and the seat foot bars, and substituting wheels of smaller diameter for the normal ones.<sup>xliiii</sup> There were only one riding horse and four draught horses for the two vehicles in the battery, and teams had to be borrowed from neighbouring artillery units to move the guns.<sup>xlix</sup>

Close-combat batteries were deployed with individual guns in the open at intervals of 400 yards apart, either just in front of, or behind, the third line of defence, with six guns allotted to a corps sector of two divisions. When not in use they were concealed in shallow pits and the detachments lived in dugouts in close proximity to the gun. They were to remain silent except in the event of tank attack, in fact they were forbidden to resist infantry attacks except in extreme urgency, and only then if no tanks had been reported.<sup>1</sup> Initially the 1915 pattern 7.7-cm field gun high explosive (HE) shell with delay action pointed fuze was considered the most suitable ammunition for the engagement of tanks. A 7.7-cm HE shell with hardened steel head was later specifically developed for anti-tank use, with an effective range against tanks of 5468 yards (5000 metres).<sup>li</sup>

The *Nahkampf-batterien* were thus the world's first dedicated anti-tank units. Even so, and notwithstanding their insufficient numbers to cover the whole German front, they formed only one component of evolving German tactics to defeat tanks with artillery.

### **Defence in depth, the consolidation of German anti-tank doctrine, 1917**

The Germans were unable to capture an intact tank for examination until early 1917, and descriptions of them given by their own troops were subject to battlefield stress factors. In February 1917, however, captured French documents that identified their 37-mm gun and some special ammunition for small arms as sufficient to destroy tanks led the Germans to reach some conclusions as to the armour thickness of British tanks.<sup>lii</sup> As a consequence intelligence summaries issued by Australian formations began recording at this time that obsolescent German 5-cm fortress guns in armoured cupolas were arriving at the front, although the availability of both these and 3.7-cm guns was stated to be limited to certain Army areas.<sup>liii</sup> These guns were carefully camouflaged and manned by personnel drawn from neighbouring batteries. By mid-March 1917 the Chief of the German General Staff was advising that a special anti-tank projectile was shortly to be issued for these weapons.<sup>liv</sup>



**Figure 3. An August 1917 postally dated postcard of a German 5-cm gun in mobile armour carriage employed as an anti-tank gun on the Western Front. Actually of 5.3-cm in calibre, the Model 1887 L/24 gun was mounted from about 1890 in German fortifications. In these it was normally housed in a shellproof concrete shelter and moved into its emplacement along a set of rails when it was required to come into action. (Author's collection)**

A new mounting for the existing 7.6-cm light *minewerfer* was introduced to allow flat trajectory fire and this type of trench mortar was being actively deployed in advanced posts for anti-tank defence as early as March 1917.<sup>lv</sup> There were in addition infantry gun batteries, equipped with four lightened 7.7-cm guns and deployed in a similar manner to the close-combat batteries. These were dug in and camouflaged primarily to repel attacking infantry at close range, and to engage tanks.<sup>lvi</sup>

Captured orders revealed that the divisional field artillery guns already emplaced in forward positions for resisting infantry attack, and for use against tanks if the occasion required it, were to be withdrawn and replaced by obsolete 9-cm guns.<sup>lvii</sup> The discovery in the same time frame of shrapnel fuzes for 9-cm guns in the I. ANZAC Corps sector suggests that this action had indeed occurred, allowing the German divisional artillery to focus on their primary indirect fire role.<sup>lviii</sup>

By mid March 1917 the German army had drawn on its operational experiences of late 1916 to develop a comprehensive doctrine for defence against tanks that involved all branches of the artillery, and stressed defence in depth.<sup>lix</sup> It was clearly defined that the destruction of tanks was the task of the German artillery; indeed it was recognised that no certain results could be obtained by the use of infantry weapons, improvised charges, or trench mortars.<sup>lx</sup> Tanks were regarded by the German staff to be excellent targets and the infantry was enjoined to have faith in the ability of its sister arm to destroy them.<sup>lxi</sup>

The artillery battle against the tank was identified as consisting of two distinct phases –  
lxii

The long-range engagement of tanks in their laying up position, or while moving up for the assault and prior to reaching the German lines;

The close-combat phase, when the tanks had reached, or penetrated into, the German defensive position.

The long-range battle was to be conducted by the foot, or heavy artillery. Recognition that the guns and howitzers of the foot artillery could effectively engage attacking tanks well before they entered the defensive system had been made as early as October 1916. Each battery was allocated a specific zone for observation and any tank appearing in it was to be engaged with salvo fire by all guns of the battery. Trials carried out with 10-cm and 15-cm projectiles had shown the former to be effective on tanks out to 4500 metres, and at even longer ranges with the 15-cm howitzer.<sup>lxiii</sup>

It was also recognized that the defensive field artillery barrage would commence falling at the commencement of any attack, and this barrage had been shown to successfully halt tanks. Indeed, in at least two instances in late September 1916 the appearance of even single tanks immediately brought down the German protective artillery barrage, destroying the tanks.



In one case the accompanying British infantry assault was abandoned.

Once the tanks had penetrated into the defensive zone the close-combat fight began. This was to be conducted primarily by the carefully sited guns of the *Nahkampf-batterien*, supported by 3.7-cm and 5-cm anti-tank guns deployed in mutually supporting positions with interlocking arcs of fire. Obstacles, either natural or man-made, were to be used to halt or slow tanks and the ranges to each were to be measured and recorded. It was stressed that the essential points were direct observation and direct laying with the object of destroying the tank with close-range hits that penetrated the armour and burst inside. Intensive training of gun detachments in gun drill and fire control was conducted with these points in mind.

Finally the field and foot artillery batteries in position behind the lines were to observe and be prepared to engage any tanks that presented a target opportunity while still within the defended zone, or that had passed through it. Casualties to their own infantry as a result of anti-tank engagements within the forward zone by artillery during the close-combat phase were accepted by the German high command, which argued that even higher casualties would result if the tanks were not engaged. The effect of tanks upon the morale of the infantry was recognised; they in turn were advised that they needed to ignore the tanks and fight the enemy infantry with the full conviction that their own artillery would defeat the tanks.

### Interim – Part One

It has been a general practice to credit the German army as the first to deploy artillery in an anti-tank role during the Great War, an assumption that has rested primarily on the absence until early 1918 of a German tank. On the contrary, the evidence establishes that although it was the Germans who by default first engaged tanks with artillery, tactics specifically to defend against the tank threat in fact developed simultaneously, and initially on a parallel basis utilising existing artillery assets and close range direct-fire doctrine, within both the German and British armies. Both belligerents recognized immediately that the gun was the most effective counter to the tank.

Despite little guidance as to the exact nature of the potential threat, Australian gunners quickly adapted the existing principles of deployment of field artillery in a direct-fire role to a new form of target. Early implementation of anti-tank gun deployments at divisional level across multiple

corps frontages illustrates that GHQ and its subordinate formation headquarters took the potential for a German response in kind seriously after September 1916.

In early 1917, however, the policies of these belligerents diverged. Anti-tank tactics in the AIF, as part of the wider British Expeditionary Force, did not evolve any further after September 1916 than the deployment of individual field guns in advanced positions to engage tanks with direct laying. Indeed, practical measures for anti-tank defence lapsed in the AIF when it became clear by March 1917 that the Germans did not yet have a tank capability.

On the other hand the Germans developed a comprehensive doctrine for anti-tank warfare during the first quarter of 1917 that encompassed defence in depth by guns, and placed the responsibility for defeating tanks wholly on the artillery arm. In addition they created the world's first dedicated anti-tank artillery units and adapted existing field and fortress guns, and infantry support weapons to the anti-tank role. They were to have many opportunities to apply and refine their anti-tank tactics during the continual Allied offensives of 1917, and would be assisted in their endeavours by both poor tactical handling of the new tank arm, and the technological limitations of the weapon itself.

---

### Endnotes

<sup>i</sup> Entry dated 25 September 1918, HQ 12 AFA Bde war diary for September 1918, AWM4, 13/39/29.

<sup>ii</sup> Entry dated 25 September 1918, HQ 1 AFA Bde war diary for September 1918, AWM4, 13/29/46.

<sup>iii</sup> Ibid. The HQ 1 AFA Bde war diary is the only unit or formation HQ diary that refers to tanks during this action, possibly because it functioned as the Group HQ for the artillery allotted to this sector.

<sup>iv</sup> Entry dated 25 September 1918, HQ 12 AFA Bde war diary for September 1918, AWM4, 13/39/29.

<sup>v</sup> Landships

<<https://sites.google.com/site/landships/home/narratives/somme1916narratives>> accessed 8 June 2019.

Figures relating to British tank numbers and casualties appearing in this article have been extracted from the information presented on the Landships website. This writer acknowledges however that discrepancies as to tank numbers and casualties exist between the works of multiple authors on the subject.

<sup>vi</sup> Statements by captured personnel of II./5 Bav FAR, II. ANZAC Intelligence Summary No 87 dated 26 September 1916, Intelligence HQ II. ANZAC Corps war diary for September 1916, AWM4, 1/33/5 Part 2.

<sup>vii</sup> Byrne, Lieutenant J R, NZFA, *New Zealand Artillery in the Field 1914-18*, Whitcombe and Tombs, Auckland 1922, pp. 137-8.

viii I. ANZAC Corps Intelligence Summary No 71 dated 3 October 1916, Intelligence HQ I. ANZAC Corps war diary for October 1916, AWM4, 1/30/9. This action occurred on 26 September 1916.

ix I. ANZAC Corps Weekly Intelligence Summary No 3 for week ending 25 November 1916, Intelligence HQ I. ANZAC Corps war diary for November 1916, AWM4, 1/30/10 Part 2.

x Statement by POW of RIR 100, II. ANZAC Intelligence Summary No 147 dated 23 November 1916, Intelligence HQ II. ANZAC Corps war diary for November 1916, AWM4, 1/33/7 Part 2. See, however, conflicting statement by POW of the neighbouring RIR 392 in I. ANZAC Corps Intelligence Summary No 116 dated 22 November 1916, Intelligence HQ I. ANZAC Corps war diary for November 1916, AWM4, 1/30/10 Part 2.

xi David T Zabecki, *Operational Art and the German 1918 Offensives*, p. 113. PhD thesis, Academic Year 2003-2004, Cranfield University, Royal Military College of Science, Department of Defence Management and Security Analysis, March 2004, accessed 10 January 2020,

<<https://dspace.lib.cranfield.ac.uk/handle/1826/3897>>

xii Fasse, Alexander, *Im Zeichen des "Tankdrachen". Die Kriegführung an der Westfront 1916–1918 im Spannungsverhältnis zwischen Einsatz eines neuartigen Kriegsmittels der Alliierten und deutschen Bemühungen um seine Bekämpfung [The "Tank Dragon", Warfare on the Western Front 1916–1918 and the Conflict Between a New Allied Weapon of War and German Efforts to Counter It]*, p. 136. PhD thesis, Humboldt University Berlin 2007, accessed 12 July 2019, <<https://edoc.hu-berlin.de/handle/18452/16336>>. The sum was equivalent to about 25 Pounds in Australian currency.

xiii Extract from a captured document, I. ANZAC Intelligence Summary No 80 dated 12 October 1916, Intelligence HQ I. ANZAC Corps war diary for October 1916, AWM4, 1/30/9. Air photograph interpretation, I. ANZAC Intelligence Summary No 97 dated 2 November 1916, and Summary No 105 dated 10 November 1916, Intelligence HQ I. ANZAC Corps war diary for November 1916, AWM4, 1/30/10 Part 1. Cratering was extensively employed.

xiv POW statements, I. ANZAC Intelligence Summary No 105 for 10 November 1916, Intelligence HQ I. ANZAC Corps war diary for November 1916, AWM4, 1/30/10 Part 1. This policy was still being emphasised in mid 1917, see POW statement, Second ANZAC Intelligence Summary No 326 dated 15 May 1917, Intelligence HQ II. ANZAC Corps war diary for May 1917, AWM4, 1/33/13 Part 2.

xv POW statements, I. ANZAC Weekly Intelligence Summary No 3 for week ending 25 November 1916, Intelligence HQ I. ANZAC Corps war diary for November 1916, AWM4, 1/30/10 Part 2.

xvi I. ANZAC Weekly Intelligence Summary No 11 for week ending 19 January 1917, Intelligence HQ I. ANZAC Corps war diary for January 1917, AWM4, 1/30/12.

xvii Deserter statement, II. ANZAC Intelligence Summary No 190 dated 3 January 1917, Intelligence HQ II. ANZAC Corps war diary for January 1917, AWM4, 1/33/9 Part 1. This is confirmed by information given by an escaped British POW that the Germans had constructed a wooden model of a British tank in Cambrai, see I. ANZAC Weekly Intelligence Summary No 9 for week ending 5 January 1917, Intelligence HQ I. ANZAC Corps war diary for January 1917, AWM4, 1/30/12. A captured order of the IR 399 dated 13 April 1917 recorded that a dummy tank was being issued to units in turn to train men in aiming at the vulnerable points, see II. ANZAC Intelligence Summary No 305 dated 25 April 1917, Intelligence HQ II. ANZAC Corps war diary for April 1917, AWM4, 1/33/12 Part 2.

xviii The GSO1 HQ Tank Corps, LTCOL H Karlake, on lessons learnt during the Battle of Amiens, 8-11 August 1918, quoted in Ventham, Philip Richard TD BA (Hons), *The evolution of British tactical and operational tank doctrine and training in the First World War*, p. 148. MA thesis submitted for PhD, University of Wolverhampton, October 2016, accessed 11 November 2019,

<<https://wlv.openrepository.com/bitstream/handle/2436/620683/Ventham%20PhD%20Thesis.pdf?sequence=5&isAllowed=y>>.

xix Strong, Paul, and Marble, Sanders, *Artillery in the Great War*, Pen and Sword Military, Barnsley, South Yorkshire, 2013, pp. 5-6. Stone, David, *The Kaiser's Army: The German Army in World War One*, Bloomsbury Publishing Plc, London and New York, 2015, p. 391.

xx Jünger, Ernst, *Storm of Steel*, Penguin Books, London, 2004 (first published in German in 1920, this edition 1961, translation to English by Michael Hofmann 2003), p. 14.

xxi Sulzbach, Herbert, *With the German Guns; Four Years on the Western Front*, Pen and Sword Military, Barnsley, South Yorkshire, 2012 (first published in Germany in 1935, first published in the United Kingdom in 1973, this edition 2003), pp. 70-72.

xxii Sulzbach (2012, p. 100).

xxiii Field Artillery Training 1914, General Staff (GS), War Office, Chapter VII, Section 163A and 163B, pp. 260-261. SS 139/4 GHQ Artillery Notes No 4 - Artillery in Offensive Operations, February 1917, which replaced an edition of April 1916, refers, p. 29, to forward guns but makes no mention of an anti-tank task.

xxiv Entries for 26 and 27 April 1915, 7 Bty AFA war diary, 20 August 1914-31 July 1915, AWM4, 13/69/1 Part 1. Entry for 22/23 July 1916, HQ 2 AFA Bde war diary for July 1916, AWM4, 13/30/20.

xxv Entry dated 8 May 1916, HQ 3 AFA Bde war diary for May 1916, AWM4, 13/31/21.

xxvi Entry dated 19 October 1916, HQ 13 AFA Bde war diary for October 1916, AWM4, 13/40/8. Named Dreyer's Bty, for the Adjutant, CAPT N L Dreyer, who commanded it during its brief existence.

xxvii Entry dated 30 October 1916, GS GHQ BEF war diary for October 1916, AWM4, 1/2/10 Part 2.

<sup>xxviii</sup> Fasse (2007, pp. 122-3). Fasse also records that twenty naval boat guns, presumably the 6-cm L/21 used by the naval infantry as a direct support weapon, were to be supplied to the German 1st Army (1.Armee) for anti-tank purposes. See also I. ANZAC Weekly Intelligence Summary No 3 for week ending 25 November 1916, Intelligence HQ I. ANZAC Corps war diary for November 1916, AWM4, 1/30/10 Part 2.

<sup>xxix</sup> The trench gun had a range of approximately 1500 metres, see Jäger, Herbert, *German Artillery of World War One*, The Crowood Press, Marlborough, Wiltshire, 2001, p. 135 and p. 140, but HQ 6.Armee stated in March 1917 that its effective range was only 600-800 metres. It was generally used for firing at loophole plates or machine-gun positions in the opposing front-line. According to a statement by a POW formerly of Trench Gun Detachment (*Schützengrabenkanonen-Abteilung*) Nr 4, the gun was little used and was not held in high regard, see Second Anzac Summary No 61 dated 1 September 1916, Intelligence HQ II. ANZAC Corps war diary for September 1916, AWM4, 1/33/5 Part 1. Personnel for the trench gun detachments were drawn primarily from the foot artillery, those for the infantry gun batteries from the field artillery.

<sup>xxx</sup> I. ANZAC Intelligence Summary No 132 for 8 December 1916, Intelligence HQ I. ANZAC Corps war diary for December 1916, AWM4, 1/30/11.

<sup>xxxi</sup> Entry dated 11 November 1916, GS HQ Fourth Army war diary for November 1916, AWM4, 1/14/2 Part 2.

<sup>xxxii</sup> Entry dated 14 November 1916, GS GHQ BEF war diary for November 1916, AWM4, 1/2/11 Part 2.

<sup>xxxiii</sup> Entry for 3 December 1916, HQ 24 AFA Bde war diary for December 1916, AWM4, 13/45/10.

<sup>xxxiv</sup> Entries dated 18 and 23 December 1916, HQ 25 AFA Bde war diary for December 1916, AWM4, 13/46/6. Entry for 1 January 1917, HQ 25 AFA Bde war diary for January 1917, AWM4, 13/46/7.

<sup>xxxv</sup> HQ 4 Aust Div Arty Order No 56 of 11 January 1917, HQ 4 Aust Div Arty war diary for January 1917, AWM4, 13/13/8. Entry for 15 January 1917, HQ 12 AFA Bde war diary for January 1917, AWM4, 13/39/11.

<sup>xxxvi</sup> Amendment No 1 dated 23 January 1917 to HQ 4 Aust Div Arty Order No 57, Schedule (E), HQ 4 Aust Div Arty war diary for January 1917, AWM4, 13/13/8.

<sup>xxxvii</sup> Entry dated 30 January 1917, HQ 13 AFA Bde war diary for January 1917, AWM4, 13/40/11.

<sup>xxxviii</sup> Entries dated 3, 7, and 25 February 1917, HQ 13 AFA Bde war diary for February 1917, AWM4, 13/40/12.

<sup>xxxix</sup> 1 Aust Div Arty Order No 79 of 26 January 1917, HQ 1 Aust Div Arty war diary for January 1917, AWM4, 13/10/16.

<sup>xl</sup> Beach, Jim, "British Intelligence and German Tanks, 1916–1918." *War in History*, Vol 14, No 4, 2007 (pp. 454–475), pp. 456–7. JSTOR, [www.jstor.org/stable/26069889](http://www.jstor.org/stable/26069889), accessed 17 July 2019.

<sup>xli</sup> Beach (2007, p. 457).

<sup>xlii</sup> Jäger (2001, pp. 155-6).

<sup>xliii</sup> Interrogation of a captured officer of IR 362, I. ANZAC Corps Intelligence Summary No 189 dated 4 February 1917, Intelligence HQ I. ANZAC Corps war diary for February 1917, AWM4, 1/30/13 Part 1. A similar report, possibly from the same source, appears in II. ANZAC Intelligence Summary No 237 dated 18 February 1917, Intelligence HQ II. ANZAC Corps war diary for February 1917, AWM4, 1/33/9 Part 2.

<sup>xliiv</sup> II. ANZAC Corps Intelligence Summary No 264 for 16 March 1917, Intelligence HQ II. ANZAC Corps war diary for March 1917, AWM4, 1/33/11 Part 2. These were actually units of the German field artillery.

<sup>xliv</sup> II. ANZAC Corps Intelligence Summaries No 268 for 20 March 1917, and No 274 for 26 March 1917, Intelligence HQ II. ANZAC Corps war diary for March 1917, AWM4, 1/33/11 Part 2. II. ANZAC Corps Intelligence Summary No 319 for 8 May 1917, Intelligence HQ II. ANZAC Corps war diary for May 1917, AWM4, 1/33/13 Part 1. *Nahkampf* also commonly translates as 'melee'.

<sup>xlvi</sup> Kraus, Jürgen, and Busche, Hartwig, *Handbuch der Verbände und Truppen des deutschen Heeres 1914-1918*, Part IX: *Feldartillerie*, Verlag Militaria, Vienna, 2007, Volume 2, Chapter 9, *Nahkampf-Batterien*, p. 623. Numbered 201 to 250.

<sup>xlvii</sup> Fasse (2007, p. 132). Establishments were later increased from the one officer and 67 other ranks approved by the Prussian War Ministry on 26 January 1917, and by the end of April 1917 an extra officer and 24 enlisted ranks had been authorised, see Kraus and Busche (2007, p. 623). Captured personnel of Nkb.204 record two officers, and gun detachments of 6-8 men in April, while personnel of Nkb.203 state their strength was three officers and 90 men, with detachments of one NCO and three men per gun, in June.

<sup>xlviii</sup> Statements by captured personnel of Nkb.204, II. ANZAC Corps Intelligence Summary No 297 for 17 April 1917, Intelligence HQ II. ANZAC Corps war diary for April 1917, AWM4, 1/33/12 Part 1.

<sup>xlix</sup> Kraus and Busche (2007, p. 623). Statement by deserter from Nkb.206, II. ANZAC Corps Intelligence Summary No 319 of 8 May 1917, Intelligence HQ II. ANZAC Corps war diary for May 1917, AWM4, 1/33/13 Part 1.

<sup>1</sup> Extracts from captured documents, II. ANZAC Corps Intelligence Summary No 288 for 8 April 1917, Intelligence HQ II. ANZAC Corps war diary for April 1917, AWM4, 1/33/12 Part 2. A captured order by the Chief of the German General Staff dated 17 March 1917 defining anti-tank armament as 3.7-cm and 5-cm guns was misinterpreted by the staff of II. ANZAC Corps, whose conclusion that this order proved beyond doubt that the *Nahkampf-batterien* were for the purpose of repelling infantry assaults is wholly in error. See II. ANZAC Corps Intelligence Summary No 309 of 29 April 1917, Intelligence HQ



II. ANZAC Corps war diary for April 1917, AWM4, 1/33/12 Part 2.

<sup>li</sup> SS 420 *Notes on German Shells (Second Edition)*, General Staff (Intelligence), General Headquarters, 1st May 1918, pp. 80-1.

<sup>lii</sup> Jäger (2001, p. 143). Para 14 of a captured order issued by HQ 6.Armee dated 25 March 1917, translated from a French translation of the original by the American Expeditionary Force, edited at the Army War College, and issued as *Use of Artillery in Combat Against Tanks*, War Department, Washington, 15 January 1918.

<sup>liii</sup> Extract from a captured order dated 17 March 1917, II. ANZAC Corps Intelligence Summary No 309 of 29 April 1917, Intelligence HQ II. ANZAC Corps war diary for April 1917, AWM4, 1/33/12 Part 2.

<sup>liv</sup> Ibid. This event does not appear to have occurred. SS 420 identifies only common, tracer, and HE shells in use with the 3.7-cm gun (pp. 56-7, 280-5), and common shell with the 5-cm gun (pp. 58-9), the latter described as having an effective range against tanks of 1100 yards (1000 metres).

<sup>lv</sup> II. ANZAC Corps Intelligence Summary No 280 of 1 April 1917, Intelligence HQ II. ANZAC Corps war diary for April 1917, AWM4, 1/33/12 Part 1.

<sup>lvi</sup> Statements by POW of *Infanterie-Geschütz-Batterie* Nr. 14, II. ANZAC Int Summary No 307 of 27 April 1917, Intelligence HQ II. ANZAC Corps war diary for April 1917, AWM4, 1/33/12 Part 2.

<sup>lvii</sup> Extracts from captured documents, II. ANZAC Corps Intelligence Summary No 288 for 8 April 1917, Intelligence HQ II. ANZAC Corps war diary for April 1917, AWM4, 1/33/12 Part 2.

<sup>lviii</sup> I. ANZAC Corps Intelligence Summary No 254 for 10 April 1917, Intelligence HQ I. ANZAC Corps war diary for April 1917, AWM4, 1/30/15 Part 1.

<sup>lix</sup> *Use of Artillery in Combat Against Tanks*, p.7.

<sup>lx</sup> Ibid, p. 6.

<sup>lxi</sup> Extract from a captured German divisional order dated 28 March 1917, II. ANZAC Corps Intelligence Summary No 309 of 29 April 1917, Intelligence HQ II. ANZAC Corps war diary for April 1917, AWM4, 1/33/12 Part 2.

<sup>lxii</sup> *Use of Artillery in Combat Against Tanks*, p.6.

<sup>lxiii</sup> Jäger (2001, p. 144).

---

## NATIONAL SERVICE DURING THE VIETNAM WAR

*Christopher Jobson*

There are a large number of myths about the National Service of the 1960s and the service of those ‘called-up’. Here are but a few truths about the Service.

Over the period 1965–1972 a total of 804,286 Australians registered for National Service; however, only 63,735 were called-up and of these only 19,450 (less than one-third) served in the Vietnam War.

If one was serving in the Citizen Military Forces (CMF), now named the Army Reserve, one was exempt from being called-up for full-time National Service, but that person had to be serving in the CMF before the relevant ballot was conducted. If the person’s birthdate was drawn in the ballot he was required to serve a period of six years in the CMF.

The first in-take of 20 years-old national servicemen was in mid-1965, and the last intake was in late 1972. The first deployment of national servicemen to the Vietnam War was in 1966.

No national serviceman was forced to serve in the Vietnam War. It was made clear to national service recruits that if they did not wish to be deployed to the War they were required to inform their relevant commanders of such, and there were a number of national servicemen who did so; as a result they were either posted to a unit, within Australia, which had just returned from South Vietnam, or to a unit that was not taking part in the War. However a large number of conscripts were keen to serve in the War because of the ‘advantages’; this meant, financially; tax-free pay and an additional Service allowance while deployed. It also meant a Defence War Service Home Loan entitlement, and ‘health coverage’ by the Department of Veterans’ Affairs. It was also seen by many conscripts as being an ‘adventurous experience’.

Most national servicemen returning from Vietnam were at the end of their two years of service and were discharged shortly after their return to Australia, and most were happy about this because it meant that they could then return straight back to their ‘normal life’.

A number of former national servicemen now state that they were treated differently to Regular soldiers and that they were abused; the training and treatment of national servicemen was no

different to that of Regular Army soldiers. A number of former national servicemen have also said that they weren't allowed to drink alcohol during the first-half of their recruit training; correct, and neither were the Regular Army recruits (Regular Army soldiers aged under 18 weren't allowed to drink alcohol at any time). They have said too that they weren't permitted to vote in political elections; initially correct, and neither were Regular Army soldiers who were under 21 years of age (prior to 1973 the minimum voting age for Australians was 21).

**AUTHOR.** THIS PIECE WAS WRITTEN AFTER DISCUSSIONS WITH SOME FORMER ARA SOLDIERS, AND DISCUSSIONS WITH SOME FORMER NATIONAL SERVICE SOLDIERS (WHO LOOK BACK ON THEIR TIME AS 'NASHOS' WITH FOND MEMORIES).

## Miniature Queen Elizabeth II Banner: Available for Purchase

*Warrant Officer Class One David Nutini  
Regimental Master Gunner*



As part of the 2021 Australian Artillery 150th Anniversary activities there will a limited edition Miniature Queen's Banner produced and made available for sale. This is an exact replica of the new Queen's Banner (1871-2021) that will be presented to the Royal Regiment at Victoria Barracks, Sydney on 6th November 2021.

On the left is the image of the framed Miniature Queen's Banner that the manufacturer (Spear of

Fame) is offering at a cost of \$520.00 without the CORAL BALMORAL Streamer and \$560.00 with the Streamer. (An additional cost to cover postage has yet to be determined)

The size of the framed banner is 320mm x 370mm and will include an individually stamped, signed, and numbered certificate. Please note, in order, to ensure quality assurance, the manufacturer will not sell the Miniature Banners without a frame.

There will only be a total of 200 miniatures manufactured and they are available for all Regiments, Regimental and Battery Associations, Unit Trust Funds, and individuals to purchase. Purchaser's must indicate whether or not they would like the Streamer included within the frame.

A dedicated account has been established within the Gunners Fund for individual payments. Please advised the RMG directly if you would like to request a specific numbered miniature banner; however please note, the following have already been allocated: 1, 4, 6, 9, 16, 20, 100, 150, 8, 12.

The miniature banners will not be available until after the Parade on 6th November 2021 when the new Banner of Queen Elizabeth II is to be presented to the Royal Regiment. All those who have paid in full by that date will either be able to pick up their miniature banner after the Parade in person, or it will be posted to them shortly thereafter.

Full payment (including postage if applicable) is required by no later than 31st October 2021. However, monthly, or fortnightly payments can be made to spread the cost over the year. Miniature Banner payments are to be made as follows:

Military Bank Australian

**BSB:** 642170

**Acc No:** 201117495

**Acc Name:** RAA REGT FUND

**Ref:** Initials, Surname and MB (e.g. AB Smith MB)

**Note:** It is important that you place your initials and surname as a reference in order to allow for the tracking of all payments.

PURCHASING A LIMITED EDITION MINIATURE QUEEN'S BANNER IS A UNIQUE OPPORTUNITY TO BE PART OF A SIGNIFICANT MILESTONE IN THE HISTORY OF THE RAA. FOR FURTHER INFORMATION CONTACT WARRANT OFFICER CLASS ONE DAVID NUTINI, REGIMENTAL MASTER GUNNER. EMAIL: DAVID.NUTINI@DEFECNE.GOV.AU OR MOBILE: 0408 604 596.

# Associations & Organisations

## **RAA Gunners Fund**

SO2 HOR School of Artillery  
Bridges Barracks, Puckapunyal, VIC 3662  
Phone: (03) 5735 6267  
Mob: 0407 140 036  
Email: gary.down@defence.gov.au

## **Australian Artillery Association Inc.**

President – Kim McGrath  
Email: president@australianartilleryassociation.com  
Mob: 0417 422 427  
Secretary – Graham Hampton  
P O Box 3486  
Caloundra QLD 4551  
Mob: 0401 400 403  
Email:  
webmaster@australianartilleryassociation.com  
North Qld Rep – Eldon Bryant  
Email: nqrep@australianartilleryassociation.com  
Phone: (07) 4755 4510  
Web: [australianartilleryassociation.com](http://australianartilleryassociation.com)

## **RAA Historical Company**

P O Box 171 Cremorne Junction, NSW 2090  
Web: <http://www.artilleryhistory.org>  
[See Membership Form in Cannonball]  
*Cannonball (Official Journal)*  
*Air Burst (Electronic Newsletter)*

## **Cutler Research Centre**

Phone: (02) 9977 0946  
Email: cutlerresearchcentre@artilleryhistory.org

## **Australian Army Artillery Museum & Artillery Display Puckapunyal**

Curator - Peter Armstrong  
Australian Army Artillery Museum  
Albury Wodonga Military Area  
Gaza Ridge Barracks  
South Bandiana, VIC 3694  
Mob: 0407 469 018  
Email: [peter.armstrong1@defence.gov.au](mailto:peter.armstrong1@defence.gov.au)  
Manager - Vacant  
*Battery Guide (Newsletter)*

## **RAA Historical Society WA (Inc)**

President - Bruce Campbell  
Phone: (08) 9221 2494 (Bus)  
Secretary - Stan Davies  
P O Box 881, Claremont, WA 6910  
Mob: 0418 903 722  
Email: [info@artillerywa.org.au](mailto:info@artillerywa.org.au)  
Web: [www.artillerywa.org.au](http://www.artillerywa.org.au)  
Take Post (Quarterly Newsletter)

## **4 Field Regiment (Vietnam) Association**

Peter Bruce  
33 Cathie Circuit, Lake Cathie, NSW 2445  
Phone: (02) 6585 7342  
Mob: 0419 349 317  
Email: [pjbruce8@bigpond.net.au](mailto:pjbruce8@bigpond.net.au)

## **7 Field Regiment Association**

President – David Moysep  
Secretary - John Balfour OAM  
Email: [jba30607@bigpond.net.au](mailto:jba30607@bigpond.net.au)  
Mob: 0418 412 354  
P O Box 206, Frenchs Forest, NSW 2086  
Web: [7fd-regt-raa-association.com](http://7fd-regt-raa-association.com)

## **10 Medium Regiment Association Inc**

President - Bev Lancaster  
Mob: 0409 936264  
Secretary - Glenn Rabbas  
133 Roseneath Street, North Geelong, VIC 3215  
Email: [rabrad@optusnet.com.au](mailto:rabrad@optusnet.com.au)  
Web: [www.10mdmraa.org.au](http://www.10mdmraa.org.au)  
*The Big Gun (Newsletter)*

## **23 Field Regiment Association**

Secretary - Peter Merlino  
63 Penshurst Road, Penshurst, NSW 2222  
Phone: (02) 9570 2776  
Email: [the23fdassoc@gmail.com](mailto:the23fdassoc@gmail.com)  
Web: [www.23fd-regt-raa-association.org](http://www.23fd-regt-raa-association.org)

## **A Field Battery Association Inc**

President – Robert (Dodger) Noonan  
248 Smithfield Road  
Fairfield West NSW 2165



Mob: 0407 904 506  
Email: noonanrf@bigpond.net.au  
Secretary - Ron (Tex) Bassan  
6 Harveys Road, Beaconsfield, QLD 4740  
Phone: (07) 4942 5433  
Mob: 0447 911 116  
Email: texbassan@yahoo.com.au  
A Field Battery National Newsletter  
Editor - Vacant  
Assistant Editor: Don (Saint) Sinclair  
Email: the.saint@tpg.com.au  
Web: <http://afdbty.australianartilleryassociation.com/>

### **101 Battery**

Secretary - Bill Telfer  
Email: wjcjtelfer@gmail.com  
Web:  
[www.homepage.powerup.com.au/~assoc101bty](http://www.homepage.powerup.com.au/~assoc101bty)

### **101 Battery (Malaya 1959-1961)**

President - Don McDonald  
Secretary- David Troedel  
57 Drummond Street, Rangeville, QLD 4350  
Phone: (07) 4637 8774  
Email: davidpat@bigpond.net.au

### **102 Battery**

Don Tait  
Mob: 0419 287 292  
Email: dmt63@ozemail.com.au  
Ian Ahearn  
Mob: 0417 691 741  
Email: Ahearn.ian@optusnet.com.au

### **103 Battery**

Doug Heazlewood  
4 Lineda Court, Warnambool, VIC 3280  
Phone: (03) 5561 4370

### **104 Battery**

Frank Corcoran JP  
PO Box 85  
Hampton VIC 3188  
Mob: 0400 113 929  
Email: corcorf@bigpond.net.au

*Germ Journal (Newsletter)*

### **105 Battery**

President – Neville Galbraith  
PO Box 465  
Deception Bay, QLD 4051  
Phone: (07) 3204 1609  
Email: neville.galbraith@bigpond.com  
Immediate Past President – David Gourlay  
Mob: 0414 430 998  
Email: dgourlay47@gmail.com

Secretary – Jason W Neville  
85 Barrier Reef Drive, Mermaid Waters, QLD 4218  
Mob: 0433 691 025  
Email: secretary105bs@outlook.com  
Newsletter Editor – MAJGEN Paul Stevens, AO (Retd)  
Phone: TBA  
Email: jphpstevens@bigpond.com  
Web: <http://www.105bty.asn.au>

*Tiger Rag (Newsletter)*

### **106 Battery**

Rob Gowling  
Unit 2, 20 Barkly Street,  
Mordiallic, VIC 3195  
Phone: (03) 9587 8391

### **107 Battery**

President - Warren D. Feakes  
Phone: (02) 6231 8369  
Mob: 0417 209 360  
Email: [wfeakes@netspeed.com.au](mailto:wfeakes@netspeed.com.au)  
Secretary/Treasurer - Hilton Lenard  
Mob: 0418 695 345  
Email: hiltonlenard@hotmail.com  
Correspondence to: 107 Field Battery  
RAA Association,  
P O Box 199, Erindale ACT 2903  
Newsletter Editor - Warren D. Feakes  
Email: wfeakes@netspeed.com.au  
Web: : [www.107bty.com](http://www.107bty.com)

*Ram - Ramblings (Newsletter)*

### **108 Battery**

John Wells  
P O Box 407, Beaconsfield, VIC  
Phone: (03) 5944 3157 (H)  
Email: john.wells8@bigpond.com

*The Journal with No Name (Newsletter)*

### **RAA Association (QLD) Inc**

President - Colonel Vern Mullins RFD ED  
Secretary - Lieutenant Colonel Ron West  
P O Box 174, Lutwyche, QLD 4030  
Mob: 0408 073 944  
Email: qld.gunline@gmail.com  
Web: <http://www.artilleryqld.com.au/>

*Gunline (Newsletter)*

### **Gunners North Queensland**

President – Mike Dinnison  
Secretary – Brett Armstrong  
Email: blarms1@hotmail.com  
Treasurer – Hilton Lenard  
Web: [www.gunnersnq.com](http://www.gunnersnq.com)

*Gunners Gossip (Newsletter)*

### **RAA Association (NSW) Inc**

President - Lieutenant Colonel Alain Dunand

Mob: 0477 888 452

Email: [president@artillerynsw.asn.au](mailto:president@artillerynsw.asn.au)

Secretary - Vacant

G P O Box 576, Sydney, NSW 2001

Email: [secretary@artillerynsw.asn.au](mailto:secretary@artillerynsw.asn.au)

Magazine Editor – Major Vic Rae RFD (Retd)

P O Box W1034, West Cessnock, NSW 2325

Phone: (02) 4990 8560 Mob: 0417 680 617

Email: [editor.gunfire@optusnet.com.au](mailto:editor.gunfire@optusnet.com.au)

Website: [www.artillerynsw.asn.au](http://www.artillerynsw.asn.au)

*Gunfire (Magazine)*

### **RAA Association (ACT)**

Secretary – Major James Casey

Mob: 0413 571 031

Email: [james.casey@defence.gov.au](mailto:james.casey@defence.gov.au)

Regimental Net on Facebook:

[www.facebook.com/RAAAssociationACT/](http://www.facebook.com/RAAAssociationACT/)

*Shot Over (Newsletter)*

### **RAA Association (VIC) Inc**

President – Colonel Jason Cooke

Mob: 0409 043 165

Email: [Jason.cooke@defence.gov.au](mailto:Jason.cooke@defence.gov.au)

Secretary – Sandra Hodgson

Mob: 0431 379 518

Email: [Secretary@artilleryvic.org.au](mailto:Secretary@artilleryvic.org.au) or

[justnotime2007-raa@yahoo.com.au](mailto:justnotime2007-raa@yahoo.com.au)

Magazine Editor – Major Neil Hamer RFD

PO Box 125, Patterson Lakes VIC 3197

Phone: (03) 9702 2100

Email: [nhamer@bigpond.net.au](mailto:nhamer@bigpond.net.au)

Web: [www.artilleryvic.org.au](http://www.artilleryvic.org.au)

Facebook:

[facebook.com/groups/ArtilleryAssocVictoria/](https://www.facebook.com/groups/ArtilleryAssocVictoria/)

### **RAA Association (SA)**

President - Geoff Laurie

12 Chatsworth Grove,

Toorak Gardens, SA 5065

Phone: (08) 8332 4485

Email: [raaassocsa@gmail.com](mailto:raaassocsa@gmail.com)

### **RAA Association (NT) Inc**

President – Major Matt Finnerty

Mob: 0402 014 669

Vice-President - President - Jeff Dunn OAM

Secretary – Rhonda Purcell

Phone: (08) 8981 9702

Darwin Military Museum Manager Norman Cramp ASM

GPO box 3220, Darwin NT 0801

Phone: (08) 8981 9702

Email:

[norman.cramp@darwinmilitarymuseum.com.au](mailto:norman.cramp@darwinmilitarymuseum.com.au)

Web: [www.darwinmilitarymuseum.com.au](http://www.darwinmilitarymuseum.com.au)

*Reveille (Electronic Newsletter)*

### **RAA Association (WA) Inc**

President – David Carter

Phone: (08) 9367 3539

Vice-president - Major P.J. Mahoney RFD

Phone: (08) 9268 8072 Mob: 0428 198 707

Secretary - John. Blylevens

P O Box 881, Claremont, WA 6910

Phone: (08) 9461 6001 (bus)

Mob: 0438 695 711

Email: [info@artillerywa.org.au](mailto:info@artillerywa.org.au)

Web: [www.artillerywa.org.au](http://www.artillerywa.org.au)

*Artillery WA (On-line Newsletter)*

### **RAA Association (TAS) Inc**

President - Major Graeme Howard

Honorary Secretary - Steven Cathcart

610 Carlton River Road

Carlton River TAS 7173

Email: [raatasinc@gmail.com](mailto:raatasinc@gmail.com)

Web: [www.tasartillery.com](http://www.tasartillery.com)

The Artillery News (Newsletter)

Newsletter Editor - Mrs Janet Stewart

11 Anson Street, Weaverley, TAS 7250

Email: [jst59804@bigpond.net.au](mailto:jst59804@bigpond.net.au)

Phone: (03) 6339 2450

*The Artillery News (Newsletter)*

### **Australian Air Defence Association Inc.**

President - Dave Spain

Email: [president@aadaa.asn.au](mailto:president@aadaa.asn.au)

Mob: 0434 471 593

Secretary - Michael Streets

AADAA, P O Box 2024,

Red Cliff North, QLD, 4020

Email: [secretary@aadaa.asn.au](mailto:secretary@aadaa.asn.au)

Mob: 0437 008 569

Web: <http://aadaa.asn.au>

### **Locating Surveillance & Target Acquisition Association**

President - Major Joe Kaplun OAM, CMC, JP

6 Apex Ave, Picnic Point, NSW 2213

Phone: (02) 9774 1471

Mob: 040774 1473

Email: [joekaplun@optusnet.com.au](mailto:joekaplun@optusnet.com.au)

Vice President - LTCOL Phil Swinsberg

Phone: (07) 3353 5210

Mob: 0425 000 370

Secretary - Bob Morrison

Phone: (02) 4861 6463

Mob: 0417 447 504

Email: [robmor47@ozemail.com.au](mailto:robmor47@ozemail.com.au)

Newsletter Editor - Major Allan Harrison

Email: [info@locatingartillery.org](mailto:info@locatingartillery.org)

Website: [www.locatingartillery.org](http://www.locatingartillery.org)

*LOCREP (Newsletter)*

### 131 Locators Association Inc

Newsletter Editor - Paul Dickson

Email: [three-zero@hotmail.com](mailto:three-zero@hotmail.com)

*Eyes & Ears (Newsletter)*

### 18 Light Anti-Aircraft Regiment Association

Secretary - Paul Hornby

4/23-25 June Place, Gymea Bay NSW 2227

Phone: (02) 9526 5769

### 9 HAA/LAA Regiments Association

President - Phil Easton

29 Michael Crescent, Kiama, NSW 2533

Phone: (02) 4237 6087

Email: [pjeaston@westnet.com.au](mailto:pjeaston@westnet.com.au)

### 41 Battery/11 Field Regiment RAA Association Inc

President – Murray Rutherford

Mob: 0404 063 424

Email: [41btyassn@gmail.com](mailto:41btyassn@gmail.com)

*Gunner Ear (Newsletter)*

### Fort Lytton Historical Association (QLD) Inc

President – Dr Mike McLean

Mob: 0412 572 326

Immediate Past President - Maurice McGuire, OAM

P O Box 293, Wynnum QLD 4178

Phone: (07) 3399 3198

Newsletter Editor - Harry Lynas

Email: [flhaguides@gmail.com](mailto:flhaguides@gmail.com)

Email: [info@fortlytton.org.au](mailto:info@fortlytton.org.au)

Email: [fortlytton2@gmail.com](mailto:fortlytton2@gmail.com)

Web: [www.fortlytton.org.au](http://www.fortlytton.org.au)

*'The Custodian' (Newsletter)*

### Fort Scratchley Historical Society

Web: [www.fortscratchley.org.au](http://www.fortscratchley.org.au)

### Royal Artillery

Web: [www.army.mod.uk/artillery/artillery.aspx](http://www.army.mod.uk/artillery/artillery.aspx)

### Royal Artillery Association

Web: [www.theraa.co.uk](http://www.theraa.co.uk)



Royal Regiment of Australian Artillery  
**Regimental Shop**

**RAA Items**  
Silk ties  
RAA berets and badges (officers and ORs)  
RAA socks  
RAA cuff links  
RAA caps

**General Items**  
Stubble holders  
Polo shirts  
Sports wear (basic)

**Field Equipment**  
Knives and tool selection  
Alice pack frames  
Dive bags  
Hydration packs  
Jet biloers  
Goggles  
Gloves  
Torches  
Sleeping mats

For Information and Orders:  
School of Artillery, Bridges Barracks  
Contact Details:  
Email: [RAACorps.Shop@defence.gov.au](mailto:RAACorps.Shop@defence.gov.au)



RAA berets and badges (officers and ORs)  
RAA badge \$7.00/\$10.00  
RAA beret \$20.00

RAA caps \$13.00

RAA ties \$35.00

RAA scarf \$35.00

RAA cummerbund \$40.00

RAA cuff links \$20.00

RAA socks \$10.00

RAA Polo shirts \$30.00  
RAA Jumpers \$50.00

Royal Regiment of Australian Artillery  
**Catalogue**

Contact Details:  
Email: [RAACorps.Shop@defence.gov.au](mailto:RAACorps.Shop@defence.gov.au)



# GUNNERS FUND

## Life Members

Receive a numbered  
Regimental key ring.

*Correct as at 1st February 2021*

LTGEN DM Mueller AO  
MAJGEN CD Furini  
BRIG S Roach (Retd)  
BRIG GT Salmon  
COL FG Colley  
COL JH McDonagh (AALC)  
COL VM Mullins  
COL AW Reynolds  
COL DA Ryan  
LTCOL DA Carew  
LTCOL P Duncan  
LTCOL W Foxall  
LTCOL BC Gray  
LTCOL VJ Gibbons  
LTCOL S Hunter  
LTCOL SA Jenkins  
LTCOL SF Landherr  
LTCOL BL Lloyd RFD, ED  
LTCOL JL Macpherson (Retd)  
LTCOL PJ Meakin  
LTCOL LF Searle  
MAJ WGG Boyd  
MAJ DT Brennan  
MAJ F Bruce  
MAJ CT Connolly  
MAJ WG Cooper  
MAJ IK Cossart  
MAJ GM Down  
MAJ M Dutton  
MAJ I Jeong  
MAJ K El Khalidi  
MAJ HR Lenard (Retd)  
MAJ G Metcalf  
MAJ AP Mumford  
MAJ WJO Norton OAM  
MAJ GM Potter

MAJ JL Ronayne  
MAJ K Schoene  
MAJ PW Spence  
MAJ MJ Taylor  
MAJ W Tapp  
MAJ JD Thornton  
MAJ D Turnbull  
MAJ L Window  
MAJ AL Ridgeway  
MAJ AL Seymour  
CAPT SA Montgomery  
CAPT KJ Smith  
LT MJ White  
WO1 SR Caswell  
WO1 G Hampton  
WO1 M Humphrey  
WO1 DJ Sinclair  
WO2 T Grieve  
WO2 AJ Hamilton  
WO2 LL Lawrence  
WO2 DG Ogden  
SGT RJ Gould  
SGT SC Robertson  
SGT MA Rutherford  
Mr N Fox  
Mr BC Kyrwood  
Mr B Leutton  
Mr LA Manning  
Mr M Vandyke

## Associations

107 Fd Bty Association  
Coast Artillery Association

## Deceased Life Members

MAJ AH Smith  
Mr KM Cossart

# GUNNERS FUND

## Annual Subscribers

Receive a numbered  
Regimental key ring &

eligible for 'Annual Badge  
Draw' as at 1 August.

*Correct as at 1st May 2020*

LTCOL D Silverstone  
MAJ CA Flear  
MAJ MV Lee  
MAJ P Spencer (Retd)  
CAPT EA Dempster  
CAPT CJ Pitman  
CAPT ET Smith  
CAPT BC Watson  
LT VN Roadnight  
WO1 SJD Jolly  
WO1 D Nutini  
WO2 E Bridge  
WO2 M Broughton  
WO2 MJ Castek  
WO2 SJD Jolly  
WO2 S Wilson  
SGT SJ Fitzgibbins  
SGT JA Overall  
BDR GP Armstrong  
BDR LS Illes

# GUNNERS FUND

## Fortnightly Subscribers'

Receive a numbered  
Regimental key ring &  
eligible for 'Annual Badge  
Draw' as at 1 August.

*Correct as at 1st May 2020*

MAJGEN DP Coghlan  
COL DM Edwards  
COL NJ Foxall  
COL DJ Hill  
COL JB McLean  
COL MRC Kennedy  
LTCOL RJ Alsworth  
LTCOL WG Cooper  
LTCOL RJ Crawford  
LTCOL NC Laughton  
LTCOL MKL Mankowski

LTCOL AJ Payne	CAPT SW Watts	SGT ECR George
LTCOL JJ West	CAPT N Waugh	SGT RD Greenwood
MAJ JLF Batayola	CAPT N Wells	SGT CJ Haire
MAJ JP Casey	CAPT BJ White	SGT R McCaig
MAJ JM Costello	CAPT NJ Woodhams	SGT C Saetta
MAJ MJ Finnerty	LT JB Childs	SGT AJ Shilton
MAJ JG Floyd	LT MJ Convey	BDR AM Bamford
MAJ S Frewin	LT OL Dyer	BDR BP Beach
MAJ NP Mahr	LT SE Brown (Furlong)	BDR GM Clark
MAJ AR McDonell	LT DJ James	BDR LT Jamieson
MAJ R O'Donnell	LT JJ Lynch	BDR NJ Mackay
MAJ BJ Perkins	LT AJ Martin	BDR CA Martinez
MAJ GM Potter	LT AJ Other-Gee	BDR Y Nasralla
MAJ JM Roberts	LT DI Roksa	BDR ES Noble
MAJ C Sandner	LT WC Ryan	BDR TL Nuttall
MAJ ME Seabrook	LT AK Stokes	BDR MT O'Connor
MAJ A Wendt	WO1 N Cole	BDR MA Parsons
MAJ AM White	WO1 BM Colles	BDR LB Sommers
MAJ JP Wiles	WO1 MS Dewar	BDR T Stewart
MAJ MA Williams	WO1 BT Donaldson	BDR DM Thornell
MAJ GM Down	WO1 DR Grundell	BDR JM Tosh
CAPT RI Best	WO1 AM Hortle	BDR JM Walsh
CAPT NS Clark	WO1 MJ Kelly	BDR JL Whitby
CAPT CC D'Aquino	WO1 TL Kennedy	LBDR JL Logan
CAPT JA Duff	WO1 DP Lindsay	LBDR JS McIntosh
CAPT DP Gillam	WO1 D McGarry	LBDR MJ Neilson
CAPT MJ Fensom	WO1 S Schuman	LBDR CZ Rasmussen
CAPT TAH Gommers	WO2 MS Dutton	GNR TR Batchelor
CAPT BD Green	WO2 MP Fountain	GNR LD Brown
CAPT BJ May	WO2 CP Grant	GNR RP Brown
CAPT SN McBride	WO2 AA Jensen	GNR TW Champion
CAPT LS McDonald	WO2 JR Millington	GNR FB De Nardi
CAPT SA McLean	WO2 GD O'Connell	GNR AW Hampton
CAPT DL Nicolle	WO2 T Organ	GNR L Hilton-Wood
CAPT LO O'Keefe	WO2 SA Regal	GNR JW Johnston
CAPT TD Radford	WO2 BJ Watson	GNR KJ Lawson
CAPT PA Ruggeri	SGT RW Archer	GNR KW Murray
CAPT JH Stanhope	SGT AJ Buzescu	GNR PM Smith
CAPT MJ Sullivan	SGT NR Corradetti	GNR ML Topliss
CAPT AJ Toms	SGT JT Elms	GNR J Vardanega
	SGT MM Farrell	

## REGIMENTAL FUND BENEFACTORS

**(The paid 'Benefactors' membership option has Closed. The new single payment option is paid 'Life' membership of the 'Gunners' Fund.)**

**Correct as at 31st October 2017**

LTGEN D.M. Mueller

LTGEN B.A. Power

MAJGEN J.E. Barry

MAJGEN D.P. Coghlan	COL D.M. Edwards	LTCOL S.G. Condon
MAJGEN M.P. Crane	COL J.A.L. Fairless	LTCOL R.J. Crawford *
MAJGEN P.J. Dunn	COL R.N. Gair	LTCOL C.F. Dodds
MAJGEN G.P. Fogarty	COL S.T. Goltz	LTCOL L.D. Ensor
MAJGEN T.R. Ford *	COL G.C. Hay	LTCOL E.P.M. Esmonde
MAJGEN S.N. Gower	COL E.D. Hirst	LTCOL J. Findlay
MAJGEN P.D. McLachlan	COL C.B.J. Hogan	LTCOL N.H.B. Floyd
MAJGEN J.P. Stevens *	COL C.H. Hunter	LTCOL R.J. Foster
MAJGEN P.B. Symon	COL A.G. Hutchinson	LTCOL N.J. Foxall
BRIG M.G. Boyle	COL D.J. Kelly	LTCOL A.W. Garrad
BRIG J.R. Cox	COL S.N. Kenny	LTCOL I.D.W. George
BRIG G.W. Finney *	COL W.T. Kendall	LTCOL V Gibbons
BRIG C. D. Furini	COL J.C. Kirkwood	LTCOL R.G. Gibson
BRIG W.L. Goodman	COL P. Landford	LTCOL G. Gilbert
BRIG N.D. Graham *	COL P.J. Lawrence	LTCOL K.R. Hall
BRIG J.G. Hughes	COL M.G. Lovell	LTCOL P.D. Harris
BRIG J.A.R. Jansen	COL I.A. Lynch	LTCOL M. Harvey (RNZA)
BRIG P.R. Kilpatrick	COL R.M. Manton	LTCOL B.N. Hawke
BRIG R.A. Lawler	COL N.H. Marshall	LTCOL P.L. Hodge
BRIG I.G.A. MacInnis	COL J.H. McDonagh (AALC)	LTCOL S.A. Hompas
BRIG T.J. McKenna	COL R.V. McEvoy	LTCOL B.G. Hurrell
BRIG K.B.J. Mellor	COL B.H. Mitchell	LTCOL J.R. Jauncey
BRIG K.J. O'Brien	COL R.B. Mitchell	LTCOL J.F. Kerr
BRIG M.F. Paramor	COL D. J. Murray	LTCOL D. Klomp
BRIG D. I. Perry	COL R.A. Parrott	LTCOL S.F. Landherr
BRIG M.L. Phelps	COL P.R. Patmore	LTCOL A. Langford
BRIG S. Roach	COL A.T. Piercy	LTCOL B.L. Lloyd
BRIG K.V. Rossi	COL A.A. Plant	LTCOL J.L. Macpherson
BRIG G.T. Salmon	COL J.C. Platt	LTCOL R. Maurice
BRIG W.M. Silverstone	COL G.G. Potter	LTCOL P.D. McKay
BRIG G.B. Standish	COL D. Quinn	LTCOL P.D. Monks
BRIG B.G. Stevens	COL S.T. Ryan	LTCOL J.E. Morkham
BRIG R.A. Sunderland	COL S.M. Saddington	LTCOL S.G.T. Mott
BRIG D.J.P. Tier	COL R.H. Stanhope	LTCOL D.M. Murphy *
BRIG P.J. Tys	COL B.J. Stark	LTCOL S.W. Nicolls
BRIG A.G. Warner	COL D.M. Tait	LTCOL T.C. O'Brien
BRIG V.H. Williams	COL R.A. Vagg	LTCOL G.F.B. Rickards
BRIG P.D. Winter	COL W.A. Whyte	LTCOL M. Shaday
COL S.P. Amor	COL B.A. Wood	LTCOL C. Taggart
COL P.F. Appleton	LTCOL S.D. Aldenton	LTCOL W.R.C. Vickers
COL B.M. Armstrong	LTCOL C.W. Andersen	LTCOL D.H.R. Wilton
COL B.J. Bailey	LTCOL B.J. Armour	LTCOL B.J. Winsor
COL J.F. Bertram	LTCOL J.D. Ashton	MAJ W.C. Barnard
COL J.P.C. Black	LTCOL R.M. Baguley	MAJ G.K. Bartels
COL R.V. Brown	LTCOL N.K. Bolton	MAJ G.F. Berson
COL A.R. Burke *	LTCOL J.E. Box *	MAJ P.E. Bertocchi
COL D.L. Byrne	LTCOL D.N. Brook	MAJ D.T. Brennan
COL S.R. Carey	LTCOL M.A. Cameron	MAJ J.P. Casey
COL S.E. Clingan	LTCOL J.H. Catchlove	MAJ P. Cimbajjevic
COL F.G. Colley	LTCOL I.D.S. Caverswall	MAJ C.T. Connolly



MAJ I.K. Cossart  
 MAJ J.M. Costello  
 MAJ S. Denner  
 MAJ P.K. Dover  
 MAJ M. Dutton  
 MAJ M.J. Finnerty  
 MAJ C.A. Flear  
 MAJ A.O. Fleming  
 MAJ W.J. Francis  
 MAJ T.J. Gibbings  
 MAJ W.H. Grimes  
 MAJ J.M. Groves  
 MAJ N. Hamer  
 MAJ P. Harris  
 MAJ M.R. Hartas  
 MAJ L.P. Hindmarsh  
 MAJ M.S. Hodda  
 MAJ D.A. Jenkins  
 MAJ G. Johns  
 MAJ D.E. Jones  
 MAJ J. Kaplun  
 MAJ J.B. Kelly  
 MAJ J.A. King  
 MAJ M.D. Laurence  
 MAJ H. Lenard  
 MAJ A.M. Ludlow  
 MAJ R.S. McDonagh  
 MAJ A.R. McDonell  
 MAJ G.D. Metcalf  
 MAJ M.W. Middleton  
 MAJ G.K. Milic  
 MAJ D.R. Morgan  
 MAJ S.R. Nebauer  
 MAJ D.T. O'Brien  
 MAJ L.W.L. Partridge  
 MAJ P.J. Prewett  
 MAJ V.J. Rae  
 MAJ S.G. Rohan-Jones  
 MAJ W.A. Ritchie  
 MAJ P.S. Richards  
 MAJ K.F. Schoene  
 MAJ L.J. Simmons  
 MAJ A.H. Smith \*  
 MAJ M.C. Squire  
 MAJ A.E.R. Straume  
 MAJ M. Taggart  
 MAJ W. Tapp  
 MAJ A.C. Turner  
 MAJ M.L. Van Tilburg  
 MAJ T.W. Vercoe

MAJ M. St C. Walton  
 MAJ C.V. Wardrop  
 MAJ P.J. Watkins  
 MAJ P.R. Widelewski  
 CAPT M.A. Pasteur (AAAvn)  
 CAPT P.J. Smith  
 CAPT P. Wertheimer  
 LT J.F. Henry  
 LT S.L. Shepherd  
 WO1 D.G. Annett  
 WO1 D.W. Bowman  
 WO1 K.J. Browning \*  
 WO1 L.A. Cooper  
 WO1 B.A. Franklin  
 WO1 E. Harkin  
 WO1 G.A. Jebb  
 WO1 M.I. Johnson  
 WO1 M.A. Johnston  
 WO1 T.L. Kennedy  
 WO1 D.R. Lehr  
 WO1 P.A. Matthysen  
 WO1 B.J. Stafford  
 WO1 R.J. Thompson  
 WO1 M. Vandyke<sup>†</sup>  
 WO1 P.T. Washford  
 WO1 C.F.J. Watego  
 WO1 G.J. Webster  
 WO2 D. Bannerman  
 WO2 M. Broughton  
 WO2 P. Carthew  
 WO2 M.R. Dawson  
 WO2 R.T.B. Hay  
 WO2 J.J. Hennessy  
 WO2 D.G. Ogden  
 WO2 A. Pavlovich  
 WO2 R.N. Skelton  
 SSGT R.W. Morrell  
 SSGT E.J. Paddon  
 SGT J. Nield  
 SGT G.V. Saint  
 SGT D.H. Wood  
 Mr C.J. Jobson

**Note (See \*):**  
 COL M.C. Crawford, COL E.D. Hirst, MAJ A.J. Balsillie and MAJ A.H. *Smith have paid three life subscriptions*  
 LTGEN B.A. Power, MAJGEN T.R. Ford, MAJGEN J.P. Stevens, MAJGEN J.D. Stevenson, MAJGEN J.

Whitelaw, BRIG G.W. Finney, BRIG R.K. Fullford, BRIG N.D. Graham, BRIG J.R. Salmon, COL A.R. Burke, COL A.D. Watt, LTCOL J.E. Box, LTCOL D.M. Murphy, LTCOL G.K. Phillips, MAJ J.B. Evans, WO1 K.J. Browning, and M. Vandyke *have paid two life subscriptions.*

**Associations**

RAA Association (Tas)  
 RAA Association (Qld)  
 RAA Association (North Qld)  
 RAA Association (Vic)  
 RAA Association (SA)  
 RAA Association (NSW)  
 RAA Association (NSW) - Newcastle Branch  
 105th Field Battery Association  
 107 (Field) Battery Association  
 Fort Lytton Historical Assoc  
 RAA Retired Officers of South East Queensland  
 Australian Air Defence Artillery Association  
 13th Battery Association

**Deceased Benefactors**

Sir Roden Cutler  
 MAJGEN T.F. Cape  
 MAJGEN G.D. Carter  
 MAJGEN P. Falkland  
 MAJGEN R.G. Fay  
 MAJGEN G.J. Fitzgerald  
 MAJGEN J.D. Stevenson (see note)  
 MAJGEN J. Whitelaw<sup>†</sup> (see note)  
 BRIG R.K. Fullford<sup>†</sup> (see note)  
 BRIG A.G. Hanson  
 BRIG R.Q. Macarthur-Stranham  
 BRIG I.J. Meibusch  
 BRIG J.R. Salmon<sup>†</sup> (see note)  
 BRIG D.D. Weir  
 COL M.C. Crawford<sup>†</sup> (see note)  
 COL J.H. Humphrey  
 COL M.J. Kingsford  
 COL G.M. Salom  
 COL A.D. Watt \*  
 LTCOL R.H.E. Harvey  
 LTCOL K.W. MacKenzie  
 LTCOL P.L. Overstead  
 LTCOL G.K. Phillips  
 LTCOL G.W. Tippets  
 MAJ A.J. Balsillie\*  
 MAJ M. Dawson  
 MAJ J.B. Evans (see note)  
 MAJ A.A. Thwaites  
 CAPT A.E. Sheridan  
 WO1 K.M. Cossart

# RAA Gunners Fund Needs Your Support

## Introduction



The RAA Gunners' Fund is designed to provide a source of funds that can be utilised for the benefit of all Gunners regardless of rank. One of the most important uses for these funds is to support requests from RAA units and organisations to assist in the ongoing preservation and promotion of Regimental heritage. Other worthy goals that the Fund supports includes, but is not limited to:

- support RAA extra-Regimental activities,
- encourage RAA Officers and Soldiers who excel in their profession,
- support activities that benefit RAA personnel, not funded by public money,
- safeguard, maintain and purchase items of RAA Regimental property,
- preserve RAA heritage and history, and
- record RAA Operational service since deployments began in the 1990s.

The Regimental Committee cannot achieve these worthy goals without the support of individual members and organisations within the Gunner community. All ranks are encouraged to make a financial contribution to the Gunners' Fund; be it fortnightly or annual contributions or by becoming a life member. Whilst a *'Life Subscription'* absolves the subscriber from being asked for any further financial contribution they are welcome to make additional contributions to further support the Royal Regiment. The list of life subscribers is published in the Liaison Letter and they receive a complimentary copy.

## Recent Projects

Over the years the Gunners' Fund has supported a wide range of requests for financial support, including some of which are ongoing such as the maintenance of the AIF and Mount Schanck Trophies. It is worth noting that the sums of money requested from the Fund are generally significant and therefore can only realistically have any chance of being supported if each and everyone of us

contribute to the Fund. Projects supported by the Fund include the allocation of:

- \$500 to 107 Battery for 50th Anniversary celebrations.
- \$500 each to 101 Battery and 103 Battery for 100th Anniversary celebrations.
- \$2,500 to 8th/12th Medium Regiment to assist to build a Regimental Memorial to coincide with the Regiment's 30th anniversary celebrations.
- \$500 to 131st Surveillance and Target Acquisition Battery to improve the Battery memorial and add a plaque to mark the 50th Anniversary of the unit and its name change from 131st Divisional Locating Battery.
- \$1,000 to 1st Field Regiment for 50th anniversary celebrations.
- \$1,000 to 4th Field Regiment for 40th anniversary celebrations.
- \$1,500 for shield to be held by winner of Mount Schanck trophy
- \$1,000 to 1st Field Regiment for 50th anniversary of 105th Field Battery, 50th anniversary of commitment to Malaya and 40th anniversary of commitment to South Vietnam.
- \$1,000 to complete the Major General T. Cape Bequest to the Regimental officer's mess.
- \$2,500 towards the Anti-Aircraft and Air Defence Memorial at 16th Air Land Regiment.
- \$700 for 53 Battery World War Two Battery Flag restoration and preservation.
- **Ongoing JNCO and Gunner of the Year prizes.**
- **Ongoing to send the JNCO and Gunner of the Year on a professional development overseas trip with the Royal School of Artillery and local artillery units.**
- Presentation of a framed miniature RAA Standard with supporting service history to those who have achieved of 40 years of service.
- On-going Royal Military College Graduation Artillery prize; and
- Annual Regimental Officer, Warrant Officer and Sergeant farewells.

**Subscriptions – See the subscription form on the end of the section for details.**

## Regimental Publications Index

### Liaison Letter

<i>Ser</i>	<i>Title</i>
1	Director Royal Artillery Technical Liaison Letter 1/48+
2	Director Royal Artillery Liaison Letter – 3 June 1954#
3	Director Royal Artillery Liaison Letter – 18 October 1954+
4	Director Royal Artillery Liaison Letter – 24 November 1954+
5	Director Royal Artillery Liaison Letter – February 1955+
6	Director Royal Artillery Liaison Letter – 31 May 1955+
7	Director Royal Artillery Liaison Letter – 30 September 1955#
8	Director Royal Artillery Liaison Letter – 20 January 1956+
9	Director Royal Artillery Liaison Letter – 18 June 1956+
10	Director Royal Artillery Liaison Letter – 26 November 1956#
12	Director Royal Australia Artillery Liaison Letter – 24 February 1957+
13	Director Royal Artillery Liaison Letter – 26 November 1957#
14	Director Royal Artillery Liaison Letter – 30 April 1958#
15	Director Royal Artillery Liaison Letter – 28 November 1958+
16	Director Royal Artillery Liaison Letter – 17 June 1959+
17	Director Royal Artillery Liaison Letter – January 1960#
18	Director Royal Artillery Liaison Letter – 29 July 1960#
19	Director Royal Artillery Liaison Letter – 17 February 1961#
20	Director Royal Artillery Liaison Letter – 6 November 1961+
21	Director Royal Artillery Liaison Letter – July 1962#
22	Director Royal Artillery Liaison Letter – October 1962#
23	Director Royal Artillery Liaison Letter – February 1971#
24	Director Royal Artillery Liaison Letter – September 1972#
25	Royal Australian Artillery Liaison Letter – February 1973#
26	Royal Australian Artillery Liaison Letter – September 1973#
27	Royal Australian Artillery Liaison Letter – March 1974#
28	Royal Australian Artillery Liaison Letter – September 1974#
29	Royal Australian Artillery Liaison Letter – March 1975#
30	Royal Australian Artillery Liaison Letter – September 1975#
31	Royal Australian Artillery Liaison Letter – March 1976#
32	Royal Australian Artillery Liaison Letter – September 1976#
33	Royal Australian Artillery Liaison Letter – March 1977#
34	Royal Australian Artillery Liaison Letter – September 1977#
35	Royal Australian Artillery Personnel Notes – October 1977#
36	Royal Australian Artillery Liaison Letter – May 1978#

<i>Ser</i>	<i>Title</i>
37	Royal Australian Artillery Personnel Notes – 1978#
38	Royal Australian Artillery Liaison Letter – March 1980@
39	Royal Australian Artillery Liaison Letter – December 1980@
40	Royal Australian Artillery Liaison Letter – May 1981@
41	Royal Australian Artillery Liaison Letter – November 1981@
42	Royal Australian Artillery Liaison Letter – 1982 (Issue One)@
43	Royal Australian Artillery Liaison Letter – 1983 (Issue One)@
44	Royal Australian Artillery Liaison Letter – 1983 (Issue Two)@
45	Royal Australian Artillery Liaison Letter – 1984 (Issue Four)@
46	Royal Australian Artillery Liaison Letter – 1986 (Issue One)#
47	Royal Australian Artillery Liaison Letter – 1986 (Issue Two) – 4 November 1986#
48	Royal Australian Artillery Liaison Letter – Issue One – 1987 – 18 June 1987#
49	Royal Australian Artillery Liaison Letter – Issue Two – 1987 – 11 November 1987#
50	Royal Australian Artillery Liaison Letter – Edition1 – 1988 – 23 June 1988#
51	Royal Australian Artillery Liaison Letter – Edition2 – 1988 – 14 November 1988#
44	Royal Australian Artillery Liaison Letter – Edition1 – 1989#
45	Royal Australian Artillery Liaison Letter – Edition2 – 1989#
46	Royal Australian Artillery Liaison Letter – Edition1 – 1990#
47	Royal Australian Artillery Liaison Letter – Edition2 – 1990#
48	Royal Australian Artillery Liaison Letter – Edition1 – 1991#
49	Royal Australian Artillery Liaison Letter – 1992 – First Edition#
50	Royal Australian Artillery Liaison Letter – 1992 – Second Edition#
51	Royal Australian Artillery – August 1993 – Liaison Letter#
52	Royal Australian Artillery Liaison Letter – 1996 – First Edition#
53	Royal Australian Artillery Liaison Letter – 1996 – Second Edition#
54	1997 – Royal Australian Artillery Liaison Letter#
55	1998–99 RAA Liaison Letter+
56	RAA Liaison Letter – 2000+
57	RAA Liaison Letter – 2001+
58	RAA Liaison Letter – 2002+
59	RAA Liaison Letter 2003 – Autumn Edition+
60	RAA Liaison Letter 2003 – Spring Edition+
61	Royal Australian Artillery Liaison Letter 2004 – Autumn Edition+



<i>Ser</i>	<i>Title</i>
62	Royal Australian Artillery Liaison Letter 2004 – Spring Edition+
63	Royal Australian Artillery Liaison Letter 2005 – Autumn Edition+
64	Royal Australian Artillery Liaison Letter 2005 – Spring Edition+
65	Royal Australian Artillery Liaison Letter 2006 – Autumn Edition+
66	Royal Australian Artillery Liaison Letter 2006 – Spring Edition+
67	Royal Australian Artillery Liaison Letter 2007 – Autumn Edition+
68	Royal Australian Artillery Liaison Letter 2007 – Spring Edition+
69	Royal Australian Artillery Liaison Letter 2008 – Autumn Edition+
70	Royal Australian Artillery Liaison Letter 2008 – Spring Edition+
71	Royal Australian Artillery Liaison Letter 2009 – Autumn Edition+
72	Royal Australian Artillery Liaison Letter 2009 – Spring Edition+
73	Royal Australian Artillery Liaison Letter 2010 – Autumn Edition+
74	Royal Australian Artillery Liaison Letter 2010 – Spring Edition+
75	Royal Australian Artillery Liaison Letter 2011 – Autumn Edition+
76	Royal Australian Artillery Liaison Letter 2011 – Spring Edition+
77	Royal Australian Artillery Liaison Letter 2012 – Autumn Edition+
78	Royal Australian Artillery Liaison Letter 2012 – Spring Edition+
79	Royal Australian Artillery Liaison Letter 2013 – Autumn Edition+
80	Royal Australian Artillery Liaison Letter 2013 – Spring Edition+
81	Royal Australian Artillery Liaison Letter 2014 – Autumn Edition+
82	Royal Australian Artillery Liaison Letter 2014 – Spring Edition+
83	Royal Australian Artillery Liaison Letter 2015 – Autumn Edition+
84	Royal Australian Artillery Liaison Letter 2015 – Spring Edition+
85	Royal Australian Artillery Liaison Letter 2016 – Autumn Edition+
86	Royal Australian Artillery Liaison Letter 2017 – Autumn Edition+
87	Royal Australian Artillery Liaison Letter 2017 – Spring Edition+
88	Royal Australian Artillery Liaison Letter 2018 – Winter Edition+
89	Royal Australian Artillery Liaison Letter 2019 – Winter Edition+
90	Royal Australian Artillery Liaison Letter 2019 – Summer Edition+
91	Royal Australian Artillery Liaison Letter 2020 – Winter Edition +

**Australian Gunner Magazine**

	<i>Title</i>
1	Australian Gunner – Vol. 1 No. 1*
2	Australian Gunner – Vol. 1.No. 2*
3	Australian Gunner – Vol. 2 No.1 – September 1979*
4	Australian Gunner – March 1980*
5	Australian Gunner – December 1980*
6	Australian Gunner – May 81*
7	Australian Gunner – November 81*
8	Australian Gunner – The Official Journal of the Royal Regiment of Australian Artillery – March 1997*

**Miscellaneous Regimental Publications**

<i>Ser</i>	<i>Title</i>
1	DARTY Personnel Notes – December 1969#
2	Royal Australian Artillery Personnel Notes – 1978#

**Notes:**

\*Copy held by SO to HOR

# Copy held by Puckapunyal Area Library

+ Copy held by HOR Staff at School of Artillery

@ Not available to HOR Staff at School of Artillery

**Key RAA Associations & Organisations**

**‘Australian Artillery Association’**

Website

[www.australianartilleryassociation.com](http://www.australianartilleryassociation.com)

Email

[president@australianartilleryassociation.com](mailto:president@australianartilleryassociation.com)

**‘Royal Australian Artillery Historical Company’**

Website

[www.artilleryhistory.org](http://www.artilleryhistory.org)

Email

[raahcoffice@gmail.com](mailto:raahcoffice@gmail.com)



See Page 125 for more Information and next for a Membership Form

## RAA Gunners' Fund Subscription Rates Revised Subscription Form 2018

### Categories

Rank	ARA Member	ARA Member	Reserve Member	All
	Fortnightly Rate	Annual Rate	Annual Rate	
MAJ & above / WO1	\$2.00	\$52.00	\$26.00	Life Membership All Ranks \$260.00
CAPT, WO2 / SGT	\$1.50	\$39.00	\$19.00	
LT, GNR / LBDR / BDR	\$1.00	\$26.00	\$13.00	

### Payment Methods (Please tick)

- Enclosed is my / our subscription to the RAA Gunners' Fund
- Paying by **Cheque**: Please return this form with a cheque made payable to "RAA Regimental Fund" and addressed to MAJ GM Down, SO2 HOR, SOARTY, Bridges Barracks, Puckapunyal VIC 3662
- Paying via **Direct Debit**: The account details of the RAA Regimental Fund are:

**Financial Institution:** Australian Military Bank  
**Account Name:** RAA Regt Fund  
**BSB:** 642 170  
**Account Number:** 100026037  
**Reference:** Your Name & Initials

Note: A copy of this completed subscription form is to be forwarded to MAJ GM Down (SO2 HOR) to enable the issue of an RAA key ring. Email: [gary.down@defence.gov.au](mailto:gary.down@defence.gov.au)

PMKeys No: \_\_\_\_\_ Regimental No (if applicable) \_\_\_\_\_

Rank / Initials: \_\_\_\_\_ Unit: \_\_\_\_\_

Surname: \_\_\_\_\_ Post Nominals: \_\_\_\_\_

Address: \_\_\_\_\_

Post Code: \_\_\_\_\_

Email Address: \_\_\_\_\_

Telephone: \_\_\_\_\_ Mobile: \_\_\_\_\_

### Commence Subscription Details

Amount: \$ \_\_\_\_\_ Effective Date: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**All subscribers will receive a 'numbered' RAA key ring on joining the Gunners Fund and if their subscription is current they be eligible for the annual 'Badge Draw' held as at 1st August each year.**



# CHECKING FIRING

WHAT HAVE YOU BEEN PROMISING  
YOURSELF TO DO EVERY TIME YOU  
READ THE LIAISON LETTER ....?

**DO NOT DELAY ANY LONGER**

# JOIN THE GUNNERS FUND NOW

**THE JNCO AND GUNNER OF THE YEAR  
AWARDS DESERVE YOUR SUPPORT**

SEE  
PREVIOUS PAGE FOR SUBSCRIPTION  
FORM

*consider making a life subscription*

