

# RNZAC ASSOCIATION NEWSLETTER #213 September 2022

**Meetings** Happy Hour: Thursday 6 October 2022 at 1700 hrs at the Papanui RSA.

**Whose is it?**



**QAMR**



Personnel from Queen Alexandra's Mounted Rifles have been back in the field on Exercise Perano in the Waiouru Military Training Area. NZ Light Armoured Vehicle troops engaged and destroyed pop-up armoured targets whilst maintaining command and control through tactical movement.



The Royal New Zealand Armoured Corps (RNZAC) memorial was rededicated at Linton Military Camp recently.

Situated in its new position at the head of Queen Alexandra's Mounted Rifles' Regimental HQ and entrance way to Mounted Operations Wing, Combat School where it can be acknowledged daily by all RNZAC personnel.

The memorial is largely signified by the M41A1 Walker Bulldog Light Tank which served within the RNZAC from 1960 until 1983. The memorial serves as an everlasting tribute to those RNZAC personnel that lost their life while serving their country.

During the rededication two new names were unveiled on the memorial stones - Warrant Officer Class One Brent Nixey and Staff Sergeant Carl Filmer. Families and friends of both Brent and Carl were present along with current and past serving members of the RNZAC. Kei wareware tatou – Lest we forget

NZ Army News 15 September #NZArmy #Force4NZ



### Last Post.

### The Death of Her Majesty, Queen Elizabeth the Second

It is with great regret that we record the death of Her Majesty, Queen Elizabeth the second. The following message has been placed in the Palace's online condolence book on behalf of the Association: On behalf of the Royal New Zealand Armoured Corps Association, I wish to express our deepest sympathies to the new King and all the Royal family on the death of Her Majesty, Queen Elizabeth the second.

Words cannot adequately convey both our admiration for Her Majesty's life of service, and our sadness at her death. As an organisation of retired soldiers, we mourn the loss of Her Majesty keenly, given her great interest and support of the Armed Services both in the United Kingdom and the Commonwealth. But we take heart from the knowledge that His Majesty, King Charles the third will carry on this legacy of support for the Armed Services.

We hope that all the Royal family may take comfort in the shared outpouring of grief from around the world, and the fact that Her Majesty had a full life that was well lived.  
From all the members of the Royal New Zealand Armoured Corps Association

Pictured right: Her Majesty, The Late Queen Elizabeth II, visiting BMC during the Golden Jubilee Tour 2002.



## Correspondence

### OPERATION LONDON BRIDGE

I was honoured and privileged to be able to represent all RNZAC members past and present at the funeral of our Captain-General. I was joined by the Colonel Commandants of the three other Corps who had the Queen as their Captain General or Colonel in Chief – the RNZA, RNZE and RNZIR. In addition four members of QAMR took part in the funeral arrangements. In this article I will only cover the activities of the Colonels Commandant as they had a different programme to the other representatives who will provide their own description.

As you are aware Her Majesty passed on Thursday 8 September and I was advised on the Friday that I would be attending Her funeral as a representative of the Corps. The whole contingent assembled in Trentham on Saturday 10 September for briefings and kit issues and commenced deploying on 11 September. The group I was in flew out of Wellington on Monday 12 September arriving in London on 13 September UK time. On Wednesday 14<sup>th</sup> September we were required to take our ceremonial uniforms to the Ministry of Defence where we stored them, apparently for security reasons. This is where we first met our counterparts from Australia and Canada to form a group referred to as the Commonwealth Colonels Commandant.

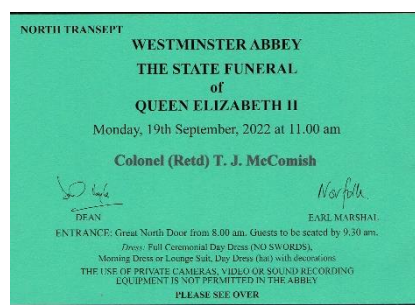
On the evening of the 14<sup>th</sup> September the VIP group gathered at the Guards Chapel to receive a briefing from the Chief Parade Marshal and the London District RSM. It was as this briefing it became very evident how complex the whole arrangements were and how detailed the planning had been. We were advised of the necessity of a full-dress rehearsal and the drill requirements of processing at 75 paces per minute with arms by our sides – it sounds easy but is actually quite difficult. It also became evident that nothing was left to chance – each of our positions in the procession were determined by seniority. The ranks closest to the casket were more senior positions – so in our grouping the seniority was Canadian, Australian and New Zealand. Then in the files the most senior was on the left and the most junior on the right – in our case RNZA, RNZAC, RNZE and RNZIR. This meant we were in the correct position when we got to Wellington Arch as you will see later.

We knew that we had a full-dress rehearsal that night. We got dressed in the Ministry of Defence building and at about 2 am moved across to Westminster Abbey. At the appropriate time we formed up into our procession formation and started the procession to Wellington Arch. The route which was taken was from Westminster Abbey up Whitehall through Horse Guards Arch onto Horse Guards Parade (where the Trooping of the Colour is undertaken) then onto Horse Guards Road to the Mall, round the statue of Queen Victoria in front of Buckingham Palace then up Constitution Hill to Wellington Arch on Hyde Park Corner. Once we arrived there we were lined up beside the arch to observe the transfer of the casket from the gun carriage to the hearse before it moved to Windsor. This rehearsal finished at about 5 am and we were returned to the Ministry of Defence building to change out of uniform. The necessity for this rehearsal was evident and it had to be done at night to minimise disruption to London traffic.

During the rest of the period before the funeral we were involved in a number of social activities which included welcoming our Governor General and Prime Minister to England as well as the others who had come from New Zealand to take part in the funeral – for example

Dame Sylvia Cartwright, Sir Don McKinnon, Dame Kiri Te Kanawa, The Maori King, and Willie Apiata VC. On Saturday 17<sup>th</sup> September we went out to Brookwood Military Cemetery with our Canadian and Australian compatriots to meet up with the rest of our contingent to participate in a “Commonwealth Act of Remembrance” with Attachés from each country laying wreaths.

Then Monday 19<sup>th</sup> September was the big day. For us it started at about 7:30 am when we went to the Ministry of Defence to get changed and at 8:30 boarded a bus for Westminster Abbey. The Colonels Commandant were lucky enough to have seats inside the Abbey for the funeral service. We were located in the North Transept about 20 rows back from the casket, but we had a good view. From where I was sitting I could see the casket clearly with the crown, orb and sceptre glistening on top of it. I could also see the Royal Family on the other side of the coffin. We were in the Abbey for most of the service and left after the piper played the lament.



On exiting the Abbey we moved to our position for the procession and awaited the casket to be mounted on the gun carriage. Once all was in place the whole procession moved off along the same route as the rehearsal a couple of nights before.



On arrival at Wellington Arch we halted on the grass alongside the roadway under the arch in the vicinity of our Commonwealth troops. We were left turned and, as indicated earlier the senior of each file was in the front with the junior to the rear – an indication of the detailed planning that had been carried out. Here we were in the prime position to observe the transfer of the casket from the gun carriage to the hearse. This activity was about 20 metres to our front and the Royal Family were about the same distance to our left front. Once the

hearse moved off, closely followed by the Princess Royal, the remainder of the Royal Family got into their cars and followed the hearse to Windsor.

This was a very emotional and fulfilling day of great history where I was extremely proud to be representing all the past and present members of the Corps.

Trevor McComish

Colonel Commandant



## **Admin & Log**

### **Cambrai 2022**

The end of the year is closer than you think. Cambrai Day is on a Sunday this year so our Cambrai Commemoration, Lunch and RNZAC Association AGM will all be held on Sunday 20<sup>th</sup> November 2022. Cost will be \$10.00 per person for the lunch this year. Names and numbers of those attending to Lenny Haynes please: [lennardhaynes53@gmail.com](mailto:lennardhaynes53@gmail.com)

### **Website Updated**

Our website has been updated to a newer version of its operating platform. It now has a fresher look. Do visit and let us know what you think: [www.rnzac.org](http://www.rnzac.org)

## **Answer: RUSSIA T90**

A fully intact example of Russia's T-90M tank has been captured by Ukrainian troops, in what's apparently the first time this top-of-the-line fighting vehicle has been acquired by Kyiv's forces since Russia's all-out invasion began. Obtaining such an advanced tank is the latest in a long line of intelligence windfalls for the Ukrainians and their NATO allies. There's a good chance that the captured T-90M — also known as the Proryv-3 (Breakthrough-3) — will ultimately make its way to those NATO allies for intelligence exploitation.

There have been suggestions that the three-man crew of the T-90M simply left it where it was after it threw a track. In one view of the rear of the tank, the track is clearly missing from the left-hand side. Depending on the seriousness of the incident, it can be a complex process to reinstall a track, and abandoning a tank is not entirely unusual in such circumstances. It is surprising, perhaps, that the crew didn't appear to make any effort to destroy the vehicle, or at least some of its more sensitive subsystems, to prevent their capture.

After all, the tank in question is one of the very latest in the Russian inventory and one that has only rarely been encountered in the fighting in Ukraine so far. Certainly, this is the most intact example that has been noted so far, with at least one previous example having been knocked out by enemy fire, also in the northeastern Kharkiv Oblast.

I mean, who could guess that the first Russian T-90M would be hunted down within days after their much-advertised deployment to Ukraine's Kharkiv Oblast. Before that, at least one T-90M was noted in action in the same region as early as April, as Russia doubled down on efforts to extend its control over the territory of the Donbas. On that occasion, a hastily camouflaged tank appeared in a video released by the National Guard of Russia, or Rosgvardia).

As we have discussed in the past, the T-90M is the most technologically advanced and capable main battle tank to have achieved fully operational status with the Russian Armed Forces. The next-generation T-14 Armata is not yet used by frontline armoured formations and is available only in very modest numbers. So far, it has not appeared in the war in Ukraine.

The first production T-90M tanks only began to be delivered to the 2nd Guards M. I. Kalinin Taman Motor Rifle Division, part of the 1st Guards Tank Army, within the Western Military District, in the spring of 2020. Estimates indicate that perhaps only 100 or so examples were in service at the time Russia launched its latest invasion of Ukraine in late February.

Ultimately, while the still-unproven T-14 aims to be a revolutionary tank design, the T-90M, from the Uralvagonzavod factory, represents what is very much an evolutionary approach, building on the T-90 series that was first introduced in the early 1990s as a further development of the Cold War-era T-72. In that sense, it's more comparable to the T-80UM2, an experimental upgrade of the Cold War-era T-80, although this appears to have yielded only one prototype, also lost in the Ukrainian war.

Among the features of the T-90M is an improved 2A46M-4 125mm smoothbore main gun in a modernized turret. This is complemented by an advanced remote weapon station, mounted on top of the turret. Photos from within the tank reveal interesting details of the sighting system, which is understood to be the all-new PNM-T.

The PNM-T is interesting in itself since it is the result of a wider effort to reduce the reliance of the Russian military-industrial complex on Western technology. This initiative gained traction when sanctions were introduced after the Russian occupation and annexation of

Crimea in 2014 and has only become more important since, as new measures make it even harder for Russia to acquire high-tech Western components. This is an issue that we have reported on in the past, and it's also one that has affected tank production, in particular.

The T-90M captured in Ukraine is more special and rare than at first glance. It features a brand new gunner's sight named "PNM-T" made using only domestic components. Few have it. Introduced around 2018 or 2019, the PNM-T is billed as a fully Russian sighting system, unlike the earlier Sosna-U system, which relied, to a degree, on components from the French Thales company. This had been previously installed on the T-90M.

The T-90M is also better protected than its predecessors, with advanced armor-protection and countermeasures capabilities. This includes Relikt built-in explosive reactive armor (ERA) designed to protect against shaped charges and to minimize the impact of armor-piercing fin-stabilized discarding sabot (APFSDS) rounds.

At the same time, the captured example is outfitted with distinctive Nakidka radar-absorbent material, or RAM, blankets. This is intended to provide another degree of defense against guided weapons, by reducing the infrared, thermal, and radar signatures of the vehicle. As well as being used to protect vehicles, Nakidka can also be used to camouflage field fortifications, ammunition dumps, and other objectives.

All in all, it looks as if this T-90M could yield some very interesting data on the capabilities of this very modern tank, and its subsystems.

Ukraine has made good use of captured Russian equipment in the past, including pressing into service tanks taken from, or abandoned by, the invaders. However, with only one T-90M seemingly captured so far in working condition, it's much more likely that it will be used for intelligence analysis, rather than going back to war against the Russians.

It joins an eclectic collection of combat vehicles and other high-end equipment that has ended up in Ukrainian hands, often in seemingly good condition.

Just last week, we reported on the first confirmed capture of a vehicle from the Russian Taran-M signals intelligence, or SIGINT, system, which joins previous electronic warfare equipment, including part of the Krasukha-4 mobile jamming system.

The PNM-T sighting system, in particular, could be of considerable interest, revealing much about the capabilities of this tank, and others similarly equipped, to engage targets in different conditions and how it performs in the face of various countermeasures. It will also likely be highly valuable to see how Russian industry has addressed the problem of replacing Western high-tech components, with similar efforts also underway to 'Russianize' the electro-optical systems in fighter jets, for example.

With developments in armoured warfare being characterized, to a strong degree, by competing trends in firepower, protection, and mobility, it seems the T-90M will be of as much interest to the United States, and other Western powers, as it is to Ukraine.

It's currently unclear to what degree Ukraine is sharing this kind of intelligence with the United States or with other partners, although, at the very least, there appear to be channels established that would seem to facilitate this. It is very likely that examples of captured Russian equipment are even being passed on to the United States. There is, after all, a pre-war precedent for Ukraine handing over Russian-origin equipment to the United States for foreign materiel exploitation (FME).

That Russia is employing a highly diverse range of fighting vehicles in the Ukraine war is, by now, no surprise, with examples ranging from some of the latest types to enter service to early Cold War-era tanks that were long since eclipsed by more advanced designs. However, as long as vehicles continue to end up in Ukrainian hands in as good a condition as this T-90M, it seems likely they will continue to yield important clues as to the wider competencies and shortcomings of Russian Armed Forces' equipment.

Author: thomas@thedrive.com

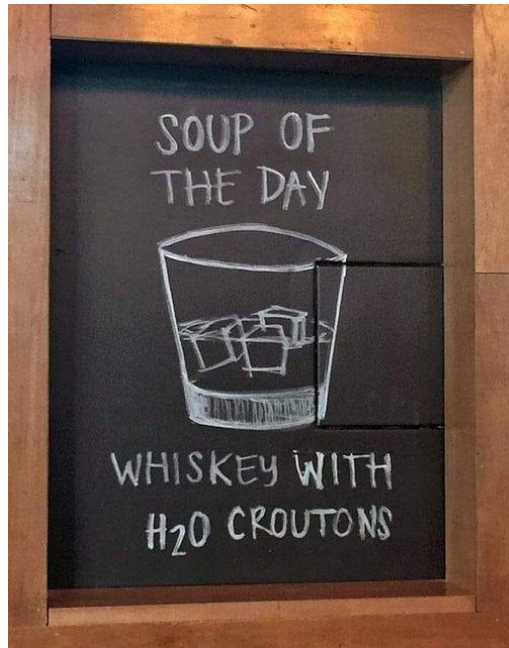
## Humour

Yep, it's a Ham Radio.



Cutting your tennis balls in half allows you to store 2 more balls in each can, saving space.





**Reminders;**

RNZAC Association Web site: [www.rnzac.co.nz](http://www.rnzac.co.nz)  
Contributions to this newsletter are gratefully accepted.  
Email: smithmd@xtra.co.nz Phone 02108049178.

**Mike Smith, Editor**