

BARRAGE

The RCA Museum News

THE RCA MUSEUM
CANADA'S NATIONAL ARTILLERY MUSEUM



April 2023

M114/39 Howitzer

We recently moved our M114/39 howitzer to a new prominent location in our gun park. Visitors now have an excellent view of the howitzer's profile; note the photo to the right. We also call the M114/39 the Gerald Bull gun. Gifted Canadian engineer Gerald Bull developed long-range artillery making the M114/39 possible. Later, Bull went to Iraq and designed a supergun for Saddam Hussein. An unknown assailant assassinated Gerald Bull in March 1990.

In the 1980s, Gerald Bull introduced the "reverse rifling" concept and "extended range, full bore" (ERFB) ammunition.

His new munitions included tail fins, which gripped the reverse rifling inside the barrel, as opposed to conventional bands that compressed into the rifling. Bull experimented with M109 155 mm 45-calibre barrels, resulting in a significant increase in range, 50% to 100%, with a low decrease in accuracy.

Gerald Bull proposed updating all the C1 155 mm howitzers (M114s) in Canada, but the Canadian Military proceeded cautiously. Canada approved the testing of two upgraded M114s. RDM Technologies, a company from the Netherlands, converted two M114s into the M114/39 howitzers in 1988. The main upgrades included the 39-calibre barrel with a larger chamber and reverse rifling. The barrel calibre equals the length of the barrel divided by the barrel diameter. In this case, $15.5 \text{ cm} / 604.5 \text{ cm} = 39\text{-calibre}$ (20-foot barrel). The old M114s used a 22-calibre or 11-foot barrel. RDM Technologies moved the carriage and jack forward to match a new centre of gravity due to the much heavier barrel.

Canada tested the two M114/39 howitzers with experimental ERFB ammunition in 1990. Gunners tried the howitzers at ranges from 25 to 32 kilometres, then at much greater distances. However, the CF cancelled the M114/39 project. The M114 was obsolete technology, and Gerald Bull was dead. It was the end of the Cold War, and Canada didn't push for further military spending. The new long-range ammunition was expensive compared to conventional munition. The CF was removing its fleet of five-ton vehicles, and this new gun required one. In addition, the M114/39 required eleven strong gunners to operate, which included lifting the 98-pound shell.

All these factors made moving forward with more M114/39 conversions unpractical. The CF did incorporate reverse rifling and long-range ammunition technology in future barrel and munitions developments. In 1995, Canada retired the two guns, and one came to the RCA Museum's gun park.



The Origins of Canadian Peacekeeping, Part 1: UNTSO

The RCA Museum is proud to present *In the Service of Peace: Canada's Peacekeepers*. This exhibit traces the history of Canadian peacekeeping by telling the stories of individual soldiers. 2023 marks both the 75th anniversary of the first United Nations peacekeeping operation, as well as the 35th anniversary of the Nobel Peace Prize awarded to UN Peacekeepers.

Many Canadians identify the Suez Crisis of 1956 and the formation of the United Nations Emergency Force (UNEF) as the beginning of UN peacekeeping. While UNEF was the first armed peace mission, the UN had employed unarmed military observers to monitor peace agreements since 1948. The first United Nations peacekeeping mission was the UN Truce Supervision Organization (UNTSO), which has operated in the Middle East since 29 May 1948 and continues to monitor the ceasefire in Israel and the Palestinian territories.

Canada began participating in UNTSO in February 1954, when MGen E.L.M. "Tommy" Burns took command of its UN Military Observers (UNMOs), including three other Canadian officers. A small number of Canadian officers continue to participate in UNTSO today under Operation JADE, which is Canada's longest-running overseas commitment. Our exhibit *In the Service of Peace* highlights two Gunners who served with UNTSO: Maj G.D. "Duff" Mitchell in the 1950s and LCol Jack Pleasance in the 1980s.

Maj G.D. Mitchell, RCA, served with UNTSO from 1957 until he travelled to Beirut as a co-founder of the United Nations Observer Group in Lebanon (UNOGIL) in 1958. A display case in the exhibit highlights some of Mitchell's personal items from this time. These include his identity discs, journal, ribbons and badges, memorabilia from Jerusalem and Petra, photographs, newspaper clippings and official UN reports.

As an UNMO, Mitchell was involved in several investigations into truce violations. These included shootings and intruders crossing the armistice line. For example, Mitchell spent much of 17 February 1958 investigating a shooting the day before, when three Israeli security personnel were wounded after crossing the ceasefire line in Jerusalem. As he recorded in his journal, he nonetheless found opportunities for socializing:

Awoke with the Old City muezzin calls [to prayer] at 0500? & had trouble sleeping in till 0730. Over to MAC [Mixed Armistice Commission] to find excitement about Mt. Scopus shooting so was ordered to join Flint at Augusta Victoria Hospital. Had jeep trouble half-way up with Graftiaux's jeep but radio relays through McGregor got help from Govt Ho [Government House]. Then sat in the blazing sun manning a handset from 1000 to 1200 – while Flint & Connel ran around taking evidence.



Maj Mitchell's belongings in the exhibit *In the Service of Peace*, reflecting his time with UNTSO. These include his journal (top left), official UN reports (top centre), the manuscript of a poem (top right) and his personal photographs (bottom centre).



Maj Mitchell (left) as an UNTSO MO, with a Jordanian police officer (centre) and a Swedish cavalry officer (right).

More jeep swapping & finally over to G.H. for lunch & caught mail run to Gaza with postcards & a cryptic letter home. Back to MAC with Norstrom to wait instructions. There is quite a flurry over Scopus & other shootings. Perhaps the Jordan-Iraq union has stirred the pot again. Anyway things were getting too dull! After lunch at G.H. I drove Norstrom back & then had to standby there all afternoon. Went over to Y[MCA] for a refreshing shower & met H. Sacher so had drinks with him at Shemesh Restaurant. Later I went over to Baxerres' place for a party. It was a lot of fun & he was a good host serving various delicacies & of course French wine.

At other times, Maj Mitchell manned lonely Observation Posts (OPs) to report on the actions of hostile parties. His busy life in Jerusalem contrasts with the austerity, isolation and boredom at an OP in the Golan Heights separating Israel from Syria. In his diary entry for 18 March 1958, Mitchell wrote:

Up at 0600 to pack for 7:30 departure to MAC [Mixed Armistice Commission] Office, Kuneitra [Syria] & OP Bravo. The road (rough track) from the Bustams House to the OP was really rough in spite of improvement work. No wonder that the UNMOs bogged or rolled over 5 Jeeps during the winter. Geo[rge] Chambers [US Marine Corps] (my OP mate for this tour) has been in Syria for 10 months & has suffered through the growing pains of OPs along the Jordan-Hula valley since last August. They had a rough time with streams flowing through



the tents and the wind blowing the tents down on top of them during the night. Many UNMOs slept in the jeeps as the safest, driest place. Bravo is well equipped with an inside radio station & high tower outside. Geo[rge] is a fairly good cook & with NTR [nothing to report] we had far too much to eat. At night the town of Dan [Israel] & the clusters of surrounding kibbutzim lit up the whole valley which makes a striking contrast to the dark mountains of Lebanon & Syria to the west & east respectively. At night Israeli Police cars with searchlights patrolled the fields below the OP.

In retirement, Maj Mitchell authored *RCHA – Right of the Line*, a history of The Royal Canadian Horse Artillery, in 1986. The RCA Museum is honoured to tell the story of peacekeeping through the eyes of Canada's Gunners like Maj Mitchell in the exhibit *In the Service of Peace: Canada's Peacekeepers*.

The Canadian Peacekeeping Veterans Association is compiling personal reflections to mark the 75th anniversary of UN peacekeeping. Visit <https://www.cpva.ca/> to read them or contribute your own story.

By Jonathan Ferguson

Paris Leave Brochure

While sifting through our archive collections, RCA Museum staff came across a peculiar artifact dating back to the Second World War: a British Army-issued information booklet given to Allied soldiers on leave in Paris, France. Tourism was common during both world wars, and the constant stream of soldiers on leave facilitated this industry. After the liberation of Paris in August 1944, Allied troops replaced the Germans in the city and began to visit the capital of France as tourists.

The “Paris Leave” handout, dated November 1944, and signed by Brigadier Carthew-Yorston of the British Army Staff in Paris, contains small, neatly-folded, yellowed sheets of paper: a welcome message, an important notice, directives on the Forces Information Centre, addresses of hostels, clubs and restaurants to visit, exchange rate information as well as a map of Paris.

The leaflet directed visiting soldiers towards Expeditionary Force Institutes (EFI) and American Expeditionary Force (AEF) establishments. Said institutes were part of NAAFI (Navy, Army and Air Force Institutes), devised by the British after WW1 to provide catering and recreational services to soldiers. They included shops, restaurants, bars, and clubs. The Canadian Military prohibited soldiers from buying food in civilian restaurants while on leave to keep any profits within the organization. The troops also benefited from free accommodation and meals at sanctioned hostels, and Allied service personnel wearing their uniform could even get free entrance to cinemas and theatres.

One of the pages provides the addresses of both a British and Canadian Forces Information Centre, an important stop for soldiers wanting any information on touristic activities in Paris, the train, bus and metro services, as well as news from the home and war fronts. The “Exchanges” page features French francs exchange rates for British, Belgian, Dutch and German currencies. During that period, paymasters would remunerate Canadian soldiers in British Pounds converted from Canadian Dollars.

What is most striking about the booklet is its overtly cautionary tone in the welcome address. The message reminds the men of their proud military status and counsels them to act accordingly. The rule they must obey: “[e]njoy yourself to your heart’s content BUT do not make yourself offensive to those around you.” It is reminiscent of a teenager’s parent warning their young one before going out for fun. Likewise, the page titled “Important Notice” cautions soldiers about the threat of venereal diseases, or VD for short (now better known as sexually transmitted infections or STIs). The notification strongly advises soldiers against visiting brothels and warns them about the risks of consorting with “enthusiastic amateurs welcoming the Liberation Troops with special favours.” The message goes on to say that “alcohol makes men wise fools” and to look out for themselves and their fellow soldiers while under the influence.

Today, Canadian soldiers will certainly receive information when travelling, but not in the same form as the “Paris Leave” booklet. With the advent of the Internet, it is much easier to access up-to-date travel and tourist information. One thing remains unchanged, however: the inherent responsibility held by soldiers. Whether going on exercise nearby, overseas or on leave, senior leadership will always brief their members on the dos and don’ts of soldier conduct.



By Venessa Léger

Horses In The Canadian Military

The RCA Museum displays two realistic-looking, life-sized horses that draw the attention of many visitors. Accompanying one of these horses is an artilleryman outfitted in a 1905 Canadian military uniform, demonstrating how far back the relationship between horse and military extends. The proof of these ties also exists in the names of some units honouring the powerful animal, such as the Royal Canadian Horse Artillery and Lord Strathcona's Horse Regiment, to name a couple.

Contemporary horse artillery units started forming in the 17th century in different parts of the world. In these units, the animals would pull light cannons or howitzers attached to two-wheeled carriages called limbers and caissons (the former designed to support the trail of the gun and the latter carrying the ammunition). The main advantage of horse artillery was speed, as the men driving the horses would be able to control the movement of the gun and limber to place them swiftly in their exact desired placement, making adjustments to the firing position quickly. Soldiers unharnessed the horses and brought them to the rear, away from the guns, before firing at the enemy. Most of the men in these units were on horseback, supporting mounted troop units.



During the war, horses were critical in artillery and transportation roles. Throughout the South African War (1899 – 1902), Canada provided the Canadian Expeditionary Force with mounted troops and 50,000 horses. In the First World War, the country sent about 130,000 horses overseas. During the Great War, the mili-



tary used draft horses (a term to describe large workhorses). Clydesdales were a popular, reliable breed. Men used the palm of their hand to measure horse size, a practice still employed today in some countries. Light draft horses were used to transport supplies, wagons and ambulances, measured 15 to 16 “hands” and weighed up to 1,200 lbs. While heavy draft horses stood over 16 “hands” tall, weighed over 1,500 lbs and pulled heavier guns.

The Canadian government bought these horses and housed them in Remount Depots, where they underwent extensive training and acclimatization to better prepare them for the hostile atmosphere they would soon face overseas. Remount Depots worked near the Royal Canadian Army Veterinary Corps, providing medical care to the animals.

Historians often overlook horses' roles in the Army, but their importance is significant. Transportation machinery available during the Great War was useless on the notoriously muddy roads of the Western Front. Horses hauled guns, ammunition, and supplies over rugged terrain. Trench warfare made it almost impossible for the Army to use horses in cavalry roles, so they utilized them mostly for transport. The animals surviving the First World War endured terrible conditions such as cramped spaces, damp environments, exposure to poison gas, disease, shelling, and starvation.

Interestingly, in 1943, a British animal welfare advocate named Maria Dickin founded a special medal to recognize and commemorate the significance played by horses in the war effort. The award, known as the "animal's Victoria Cross," emphasizes brave horses and other creatures, some posthumously, for their "outstanding acts of bravery or devotion to duty."

The mechanization of the Army, which happened progressively leading up to the Second World War, lessened the need for horses. By 1933, motorized vehicles and self-propelled artillery started replacing horses. Presently, the only horses in the military are attached to ceremonial units such as Lord Strathcona's Horse in Edmonton, Alberta and the Governor General's Horse Guards in Toronto, Ontario. Even though the Canadian Army has not used horses in active service for a long time, it is impossible to disassociate them from warfare. They deserve respect for their valuable contribution to war efforts and recognition for the hardships they underwent.



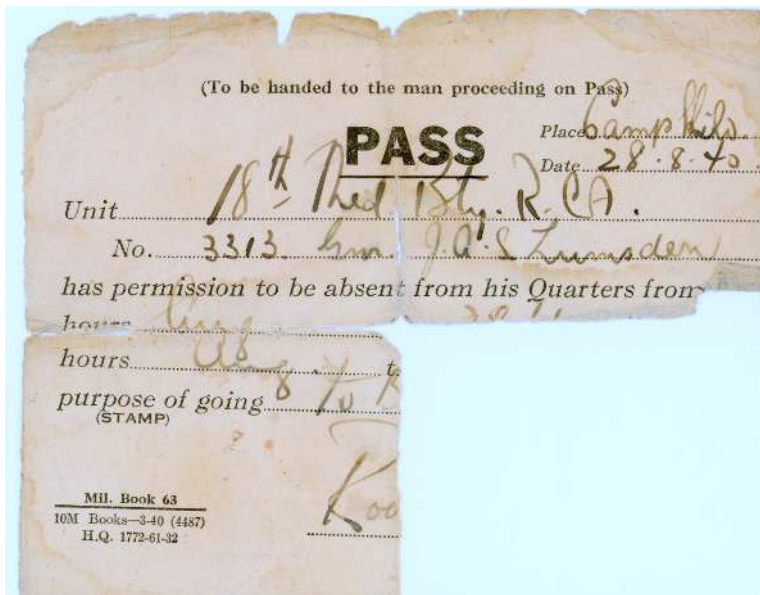
The Archie Lumsden A3-CATC Camp Shilo Collection

At the museum, we commonly get requests for information on soldiers that trained at Camp Shilo during the Second World War. We rarely have data on recruits, but sometimes we do. In the case of Archie Lumsden, we have his photo album. Most recruits did not take photos of their experiences, making Archie's album all the more unique.

Canada had a network of recruit training sites during the Second World War, including A3-Canadian Artillery Training Centre (CATC) at Camp Shilo and A4-CATC in Brandon. The other leading artillery site was Camp Petawawa which housed A1 and A2-CATC. Our collection contains many photos of A1 and A2 in Petawawa. We have a minimal number of pictures on A3 or A4 in Shilo and Brandon, respectively. However, we have the photo album of Lieutenant J. A. (Archie) Lumsden, shown to the right, who trained at A3-CATC at Camp Shilo in 1940 and 1941.

At first glance, the photo album looks average. However, the direct connection to A3-CATC Camp Shilo makes the album unique and part of Manitoban history. I can relate to this binder because my grandfather also trained at A3 Camp Shilo in 1940/41, and he would have seen many of the same sights and had many of the same experiences. Indeed, thousands of Canadians had grandparents training at A3 Camp Shilo or A4 Brandon during the Second World War.

Our archival records do not list Archie Lumsden as the original owner; instead, we list the original owner as unknown. With a bit more checking, I found a concealed newspaper clipping that included a photo of Archie, with the caption, "Leaves for West." After determining who owned the photo album, we reviewed our collections database for other artifacts belonging to Archie Lumsden. We located one additional artifact: a Camp Shilo Pass for No. 3313 Gunner J. A. Lumsden, dated 28 August 1940. Note the pass below; we only have 3/4 of the receipt. The photo album and leave pass likely came from the same anonymous donation in 1984.



The first photo in the album shows Gunner Archie Lumsden in uniform, captioned on the back, "en route to Shilo Camp," dated 15 August 1940, shown below. Archie's leave pass came two weeks later. He then included photos of attending an Armistice Parade with fellow soldiers,



followed by more photos of Archie in uniform and on sentry duty at Fort Garry in Winnipeg. Based on photographic evidence in the album, Archie was probably a student at the University of Manitoba and returned to classes in the fall of 1940. After university classes, the Canadian Army commissioned Archie Lumsden as a junior officer.

The young officer photographed artillery training at Fort Garry before returning to A3-CATC Camp Shilo in 1941. The first photos of Camp Shilo include the Lieutenant and fellow soldiers testing a new Field Artillery Tractor on Shilo's hills and prairie terrain, shown to the right. Other images include newspaper clippings of military vehicles, such as a Field Artillery Tractor and a 15-CWT Truck.



Archie Lumsden included photos of himself undergoing everyday recruit training experiences, including standing to attention, digging gun pits, partaking in field exercises wearing an operational uniform, and firing WW1-era artillery. One of the best artillery-related photographs shows a vintage 4.5-inch howitzer post-firing in honour of visiting Prime Minister William L. Mackenzie King. Note the image of Archie and the gun team dated July 1941, below.



Archie is in about 1/3 of the photographs. He relished taking pictures of small groups of soldiers, likely his friends, and tagged their names on the back of many images. Archie included pictures of himself and others riding an Indian motorcycle with a sidecar. Note the photo to the right. In the album, he added a unique photo of No. 12 Troop A4 Brandon Sports Champions from the summer of 1941. A4-CATC recruits trained in Brandon, Manitoba, and completed their artillery range training in Shilo. Recruits from across western Canada trained at A3 Camp Shilo and A4 Brandon. Both centres participated in team sports; the photo below is an example of the recruits that participated.



After training at A3-CATC Camp Shilo in the summer of 1941, the new Lieutenant headed west to British Columbia for a coastal defence role. Archie took many photos of himself and other soldiers in B.C. He included pictures of an 18-pounder guarding the Pacific coastline and an assemblage of soldiers with Canadian Military Pattern trucks and motorcycles, shown below. The last image in the album is from late 1942. The photo album and the leave pass are the only supplementary information we have on Archie Lumsden. We do not know if he went overseas to fight with the First Canadian Army after 1942.



Archie Lumsden was one of 1.1 million men and women who wore a Canadian military uniform during the Second World War. His experiences and images probably match with many other recruits at A3 Camp Shilo, yet only a fraction had cameras and took personal photographs of the training camp. Thankfully, Archie enjoyed taking snapshots and made a keepsake album of his Canadian war experience. His album is a fascinating glimpse of Camp Shilo and recruit training during the war. Many of these photos are now on our website in the photo gallery section.

By Andrew Oakden

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