

BARRAGE

The RCA Museum News

THE RCA MUSEUM
CANADA'S NATIONAL ARTILLERY MUSEUM



LE MUSÉE NATIONAL DE L'ARTILLERIE DU CANADA
LE MUSÉE DE L'ARC

March 2017

Brig General WW Turner

We are sad to report the passing of Brigadier General WW Turner on 13 December 2016 at the age of 95.

Brig General WW Turner was born in Winnipeg, Manitoba on the 17 September 1921. He enlisted in the militia in 1938, entered Royal Military College in 1940, and commissioned as a Second Lieutenant in the Canadian Army in 1942. During WWII, he served in Canada, Great Britain and Northwest Europe, landing on the beaches of Normandy in August 1944, and reaching the rank of Captain in December 1944.

Brig General Turner had a long and distinguished military career that included Commanding the Canadian Contingent and Deputy Chief of Staff of United Nations Forces Cyprus in 1966-1967, being appointed Commandant of the Royal Military College in 1973, retiring from active service in 1977, and being appointed Colonel Commandant of The Royal Regiment of Canadian Artillery from 1979-1986. He was arguably one of the best Colonel Commandants - known for being a positive influence on young serving gunners and having unmatched passion and pride for The Royal Regiment of Canadian Artillery.



The pictures above show three of his donated uniforms.

His loving wife of 65 years, Mrs. Hope Turner, recently donated a number of her husband's military uniforms, including a red Mess Kit from his time as Colonel Commandant, tan summer colonel's uniform, likely worn in Cyprus, and his dress blues Colonel uniform. We also received a number of artifacts, including three Herbert Johnson Forage caps in excellent condition and a retirement plaque dated 1986.

At the RCA Museum, we wish to honor the memory of Brigadier General WW Turner with an exhibit including one of his uniforms and artifacts. We also may include a trophy that bears his name: The WW Turner Trophy presented annually (1986 to 2009) to 'The Best Third Year Artillery Cadet of the Royal Military College of Canada as Selected by the Commandant.' Our curators at the museum have started work on this project.

The Royal Canadian Artillery Museum
CFB Shilo, P.O. Box 5000, Station Main
Shilo, Manitoba, R0K 2A0

Website: rcamuseum.com
Facebook: The RCA Museum

Musée de l'Artillerie royale canadienne
BFC Shilo, C. P. 5000, succursale Main
Shilo (Manitoba) R0K 2A0

In the Footsteps of Vimy

To mark the centennial of the Battle of Vimy Ridge that was fought on a chilly Easter Monday morning in 1917, the RCA Museum will feature a temporary exhibit called “In the Footsteps of Vimy” from April 7 to Nov. 30, 2017.



This is the third exhibit the museum has hosted since the beginning of the centenary of the Great War.

In the winter of 1917, as the home front reeled from the 25,000 casualties at the Battle of the Somme, the fully formed Canadian Corps was preparing to meet the challenge given to it by the armies allied against Germany in France.

It was now a heavily fortified ridge, held by the German Army since October 1914. Attempts to retake it by the French and the British had ended in failure.

It was coldest winter of the war, with moral at its lowest at home and new recruits arriving

every day. The four Canadian Divisional Commanders, led by Brig. Gen Julien Byng, were determined to put to the test those innovations that were beginning to show promise for the Canadians at the end of the Somme.

New tactics for the artillery, intense training for every soldier and coordination from the lowest ranks to the highest positions at Head Quarters were honed behind the lines and in the forward trenches.

If the war was to finally turn in the favour of France and Britain and her allies, then Arras in the Nord-Pas-de-Calais region of France needed to be where they at last broke through the German lines.

But for the Canadian Corps, just north of Arras, the place was Vimy Ridge and the time was Z hour at 5:30 am on 9 April 1917. The successful taking of Vimy by the Canadians is considered Canada's entry on the world as a mature sovereign nation on the international stage.

This exhibit will include a large interactive of an aerial view of the battle, contemporary film and role playing experience over a large scale map of the 1st Division's objectives during the battle. Artillery guns, infantry kit and uniforms and other equipment will also be on display.



1 RCHA in Korea

In the fall of 2016, 1 RCHA sent over a Bankers Box full of historical documents including, essays, change of command reports and regimental histories. I found a number of interesting essays, one on post-traumatic stress disorder and Vietnam Veterans, and a couple of very interesting 1 RCHA Regimental histories.

In a military report from 16 July 1992, I found a fascinating history of 1 RCHA that included the Korean War. Canadian gunners representing RCHA fought in the Korean War from April 1951 to April 1953; 2 RCHA arrived in Korea in April 1951, and was replaced by 1 RCHA a year later in April 1952. 1 RCHA stayed in Korea for approximately one year until April 1953. This report from 1992 added more detail: “In the spring of 1952, 2 RCHA was replaced in Korea by 1 RCHA under the command of LCol E.M.D. McNaughton. The unit distinguished itself particularly during the enemy assault on the 1 RCHA position on Hill 355 in October 1952. During the conflict the Regiment fired 247,182 rounds.” Before reading this report, I was not aware that Canadian gunners distinguished themselves during battles on Hill 355, notably in October 1952.



The picture above shows a composite detachment consisting of 1 RCHA / 2 RCHA during the handover period in May 1952. I found this picture in our museum archives.

In another report, written in the late 1980s, titled ‘An Introduction to the 1st Regiment Royal Canadian Horse Artillery’, I found more information on the battle for Hill 355 in October 1952. Regarding 1 RCHA the report states:

While supporting the Royal Canadian Regiment during the intense fighting for Hill 355, the Regiment's fireplan contributed greatly to saving the RCR positions. A bond of mutual admiration which rapidly grew between the RCR and “A” Battery RCHA was cemented by painting the RCR crest on the Battery's guns. To this day “A” Battery proudly bears the RCR crest on all its guns. The Regiment was relieved in Korea in April 1953 and returned to Winnipeg.

Indeed, display of the RCR crest, or VRI cipher, on A Battery, 1 RCHA guns is a badge of honor in the defence of Hill 355. After reading this passage, I was able to locate one example of the RCR crest on a gun in the museum's collection.

One of our M109's, originally from A Battery, 1 RCHA, bears the RCR crest, pictured above.



There is not a lot written on Hill 355 during the Korean War. Throughout the war, Canadian soldiers defended Hill 355, and others, from enemy assault, most notably in October 1952. Hill 355 was located 40 kilometres north of Seoul, near the frontlines and close to the 38th Parallel. The hill is currently near the Korean Demilitarized Zone between North and South Korea.



Pictured above: 1 RCHA firing their first round in Korea in April 1952.

Every Canadian battalion that served in Korea spent some time at Hill 355. Throughout the war, it was of high strategic importance to the United Nations forces because of its prominent size and key defensive position.



Pictured above: 1 RCHA operating a QF 25 pounder gun under United Nation Mandate during the Korean War in 1952.

In October 1952, this hill was the scene of fierce fighting between the Royal Canadian Regiment stationed on the hill and the Chinese to the North that were periodically bombarding the hill. On October 23, the Chinese launched an offensive attack, first with a heavy artillery barrage, and then with infantry soldiers advancing on the RCR; eighteen Canadian soldiers were killed, with 35 wounded and 14 taken prisoner. On October 24, due in large measure to the artillery support from 1 RCHA, Hill 355 was retaken by UN soldiers. The eighteen fallen soldiers at Hill 355 are among the 516 Canadians who died in service during the Korean War.

The M40A1 Rifle (106-MM Recoilless) served as a lightweight recoilless weapon for both antipersonnel and anti-tank roles in the Canadian Forces. It is an air cooled breech-loaded, single shot rifle used for direct firing. In Canadian service, it could be fired from a M79 ground tripod mount that could also be mounted on a ¼ ton truck (M38 and later the M38A1) or the M113A1 APC. The breech is operated manually with a percussion style firing pin.

The M40 is an upgrade from the M27 recoilless rifle introduced in the early 1950s during the Korean War. The M27 had reliability problems, was too heavy and had a disappointing effective range. The US used the M40 during the Vietnam War, and the rifle is still used around the world. We have one M40A1 Rifle displayed in our museum, pictured below.



The M40 has an M8C .50 caliber, spotting rifle above the barrel. The spotting rifle fired a round with a matching trajectory to the 106 mm labeled round, leaving a puff of smoke on impact. This made the weapon easier to aim and adjust according to the impact of the spotting round. When fired, the gun's projectile followed a curved path to compensate for gravity.

At the RCA Museum, we have a significant collection of military ordnance and munitions, including 106 mm recoilless rifle rounds; note the picture to the right. The rounds are labelled 106 mm to prevent usage of incompatible M27 105 mm ammunition. These rounds are one-piece using a fixed cartridge allowing for fast loading. Note the perforated cartridge. The cartridge holes allow gas to escape quickly out the vented breech neutralizing recoil. The M40 created a significant danger zone with a back-blast in a triangular shape extending 130 feet backward and 150 feet across. These guns tended to operate in pairs, with one vehicle shooting while the second vehicle re-positioned to fire on potential enemy counter-battery locations.



Director's Note

December to February is traditionally a quiet period for the museum. We are currently preparing for our next temporary exhibit 'In the Footsteps of Vimy' to open April 7th. We are also preparing for the Royal Manitoba Winter Fair starting March 27th. We are setting up a 50 foot museum display for the week in the Manitoba Room. We are also working on updating our interactives throughout the museum. We recently upgraded our Great Gunner exhibit with new touchscreen technology. We are also working on the Be a Gunner exhibit and a touchscreen interactive for the Vimy exhibit. Of note, our website has seen increased traffic over the past three months. During the last quarter we had approximately 38k hits which is almost double the 3 month average.



We recently switched a C1 (M1A1) medium towed 155mm howitzer in our National Artillery Gallery. We had, previously, on display a medium towed 155mm howitzer with an incorrect paint colour and incorrectly painted barrel. The replacement C1 155mm howitzer has a fresh coat of the Canadian shade of semi-gloss olive paint, with tactical markings correct for the 1960's time period. It also includes a bare metal barrel that is proper to that model of gun. We also added new tires, the telescope mount, and a suitable model M12A7C panoramic telescope. We believe our updated C1 (M1A1) 155mm howitzer adds to the splendor of the museum.

During the mid-1950s, RCHA equipped their regiments with the M2A2 105mm howitzers, and the fourth battery of each regiment received the M1A1 155mm howitzers. The M1A1 (later re-designated C1) 155mm added significant firepower compared to the M2A2 105mm. The M1A1 155mm howitzer was in service with the Canadian Forces from 1956 – 1968. The 155mm howitzer fired a (43 to 45 kilo) projectile, with a range of 14,600 metres (16,000 yards), and was operated by a detachment of 10 gunners. The gun is still in operation today around the world.

The M114/39 towed howitzer

We recently had our M114/39 (converted C1 (M1A1)) 155mm howitzer repainted. Currently in storage, note picture to the right.

The Canadian M114/39 guns are converted C1 medium towed 155mm howitzers originally manufactured by Sorel Industries Ltd in Quebec. The main upgrades include a new American M185 39-calibre barrel with larger chamber and increased 1:20 twist rifling. The conversions were done by Rheinmetall Denel Munition (RDM) Technologies in the Netherlands. Modifications also include moving the carriage and jack forward to match a new center of gravity. The RDM conversion enabled the gun to fire extended range ammunition. This gun can fire Extended Range Full Bore (ERFB) ammunition to a maximum distance of 24,600 m and Extended Range Full Bore with Base Bleed (ERFB-BB) ammunition up to 32,400 m. Canada had RDM convert two C1 guns. Canada had planned on converting the remaining 56 guns in inventory, however they did not proceed. It required a crew of 11 and 5 tonne (6 x 6) truck to tow it.



Our next temporary exhibit is on the Battle of Vimy Ridge. We are including a German mortar used during the Battle of Vimy Ridge that was taken as a war trophy by Canadians on 9 April 1917. Mortars in general do not receive much attention. They are essentially small proportioned cannons for launching explosive shells. Most mortars are muzzle loading with short barrels. The RCA Museum does not have any WW1 British or Canadian mortars, which is a notable hole in our collection. Most of these were disposed of after the war, but we do have two WW1 German *Minenwerfers*.



The German Army used three sizes of *Minenwerfer*, mine launchers, extensively during WW1, notably to clear close range <1000 metres obstacles such as enemy bunkers and barbed wire. The three sizes include the 25 cm *schwerer minenwerfer* (heavy mine launcher) or SMW which the RCA does not have. A 17 cm *mittlerer minenwerfer* (medium mine launcher) or MMW which will be included in our new temporary exhibit on Vimy Ridge (pictured above), and the 7.58 cm *leichter minenwerfer* (light mine launcher) or LMW, which we also have displayed in our museum.

The 7.58 cm lite version and 17 cm medium versions had an effective firing range of 300 metres with the 25 cm heavy version having an effective range of 540 metres. They also could fire sensitive explosives due to the low muzzle velocity such as ammonium nitrate-carbon explosives. While mortars do not visually look as impressive as many of our guns, they played an important role in WW1, notably during trench warfare. Please come and see our new exhibit, entitled *In the Footsteps of Vimy* opening, 7 April 2017.

First Canadian Gunner Manual - 1875

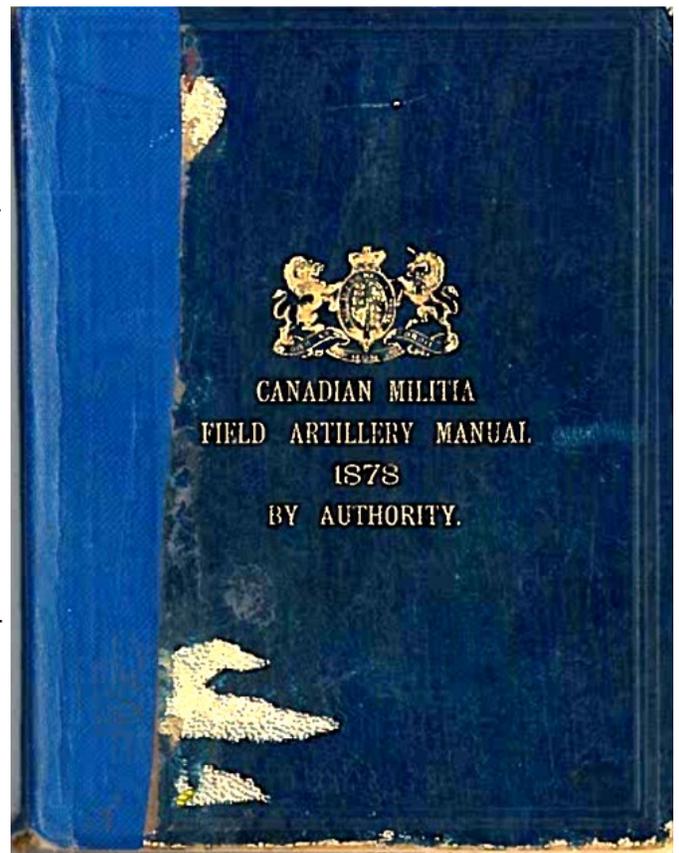
In our archives, I found the first Canadian publication of uniform instruction for gunners written in 1875, published in 1878, titled: *Canadian Militia Field Artillery Manual*. Before this date, militia officers relied on at least a dozen aging British sources on gunnery. This proved to be impractical and led to training difficulties.

One of the most influential Great Gunner's in Canadian history, Major General Thomas Bland Strange (1831 to 1925) wrote the preface to this manual. At the time, he was a Lieutenant Colonel and the Inspector of Artillery and Warlike Stores for Canada, and Commanded "B" Battery, stationed in Quebec City. In part, he wrote:

It is desirable to have [a] uniform system of Artillery instruction throughout the Dominion, as closely as possible in accordance with that of the Royal Artillery, but the excellent text books of the latter distinguished service, are more scientific, voluminous, and costly, than is considered necessary for the militia artillery of Canada.

Training the militia officers on the standardized format of gunnery became the task of The Royal Regiment of Canadian Artillery. Canada already had a strong militia with an effective strength of thirty-four thousand men when The Royal Regiment of Canadian Artillery formed in 1871.

Each artillery officer was expected to acquire a copy of the field artillery manual. The objective was to condense this information into a simple and up-to-date source. Of particular importance, the manual defined and standardized the duties of each gun number. Having a single published source for militia officers to rely on undoubtedly became a significant accomplishment. It is certainly invigorating to have this important and tangible piece of Canadian Gunner history in our collection.



RCA MUSEUM: APPLICATION FOR MEMBERSHIP or RENEWAL

_____	TYPE	COST	BENEFITS
_____	Individual	\$ 30.00 / yr	<ul style="list-style-type: none"> - Free Admission; - Newsletter; and - Invitations to special events
_____	Family (individual, spouse, children under 18 yrs)	\$ 50.00 / yr	<ul style="list-style-type: none"> - Free Admission; - Newsletter; and - Invitations to special events
_____	Association/ Corporate	\$ 300.00 / yr	<ul style="list-style-type: none"> - Newsletter; - Director's Tour of RCA Museum and collection (max 20 participants); and - Association/corporate members may purchase Museum memberships at half price

Thank you for your support!

All donations are promptly processed and a tax receipt provided.

Name / Nom: _____

Address / Adresse: _____

City / Ville: _____ Province / Province: _____

Postal Code / Code postal: _____ Phone / Téléphone: _____

Email address /email adresse: _____

Do you wish to unsubscribe from receiving the newsletters, information and updates by email from the RCA Museum? ____ Yes or ____ No

Contact Us

Telephone : (204) 765-3000 Ext. 3570
 Fax:(204) 765-5289
 Email: rcamuseum@forces.gc.ca
 Website: rcamuseum.com

**The Royal Canadian Artillery
 Museum (The RCA Museum)**
 Building N-118
 CFB Shilo
 P.O. 5000, Station Main
 Shilo, Manitoba R0K 2A0

**Musée de l'Artillerie royale
 canadienne**
 (Musée de l' ARC)
 Bâtiment N-118
 BFC Shilo
 C.P. 5000, succursale Main
 Shilo (Manitoba) R0K 2A0

Telephone : (204) 765-3000 poste 3570
 Facsimile : (204) 765-5289
 Courriel : rcamuseum@forces.gc.ca
 Site Web : rcamuseum.com

Pour nous joindre

Director/Directeur	Andrew Oakden	Ext/poste 3763
Senior Curator/Conservatrice principale	Kathleen Christensen	Ext/poste 3531
Assistant Curator/Conservatrice adjointe	Dayna Barscello	Ext/poste 3577
Collections Manager/Gestionnaire des collections	Clive Prothero-Brooks	Ext/poste 3076
Admin Coordinator/Coordonnatrice administrative	Cheryl van der Raadt	Ext/poste 4563
Front Desk/Reception	Britney/Anita	Ext/poste 3570