

CHAPTER 5 CME MEMORIALS

Primary Memorials

0501. While there are a large number of memorials through which we can recall the contributions of specific military engineers and units, our primary memorial is the All Sappers Cenotaph. In addition, our set of Books of Remembrance which are on display at CFSME record the names of those sappers who have died in the service of Canada.

0502. All Sappers' Cenotaph. The All Sappers' Cenotaph at Vedder Crossing, BC was quarried and constructed entirely by Military Engineers in 1945 and 1946. Although CFB Chilliwack is now closed, the monument still stands near what was the entrance to the Base. The cenotaph is a fitting monument honouring Engineers who served in the many conflicts over the last century. The South side of the cenotaph is inscribed with the words "*In Memory of all Sappers of the British Empire who have given their lives in the service of their Country,*" from whence comes the name All Sappers' Cenotaph. The West face is devoted to Canadian Engineers of the First World War and Korea. The East face is inscribed "*In the Service of Peace Au Service de la Paix,*" in memory of those who died during the Second World War, and the North side is devoted to Canadian Sappers who gave their lives while serving with other corps.



Figure 5-1 All Sappers Cenotaph



Figure 5-2 50th Anniversary of Engineers in Vedder Crossing

0503. Several memorials in the vicinity of the All Sappers' Cenotaph commemorate those who served at CFB Chilliwack. One monument reflects the early years of Camp Chilliwack and consists of a life-size concrete bell tent, Bailey panel and plaque recognizing CFB Chilliwack as the Home of the Engineers. An adjacent engraved granite plaque details those units that have been stationed at "*The Home of the Canadian Military Engineers.*" A second concrete memorial in the form of a silhouette of stylized mountain peaks with embossed Bailey bridge panels and bearing the shields of the city and district of Chilliwack records the 1992 celebration of the 50th Anniversary the establishment of Camp Chilliwack. A plaque dedicated to those civilian employees who worked at CFB Chilliwack is also found in this area. A dedication stone and memorial "Rose of Sharon" bush (Korea's National Emblem) is also found in the vicinity of the All Sappers' Cenotaph. It was dedicated on 23 June 1996 to further honour the Canadian veterans of the Korean conflict.

0504. With the closure of CFB Chilliwack and the demolition of the Protestant and Roman Catholic chapels, the numerous memorials that had been collected there were moved to CFB Gagetown where they are currently displayed in either the Gagetown chapels or the CME Museum.

0505. Books of Remembrance. Three Books of Remembrance record the names of Canadian military engineers who lost their lives on active service during the First and Second World Wars and the Korean conflict. The originals of the Second World War and Korea Books of Remembrance are held, with those of other engineers of the Commonwealth, in the Royal Engineers (Kitchener) Memorial Chapel in St. Paul's Cathedral, London, England. Copies of the books are on display at the CME Museum.



Figure 5-3 Books of Remembrance

0506. The names of the fatalities of the Second World War RCAF Construction and Maintenance Units are found in Deller's Book: "*Per Ardua ad Usquam, History of the CMUs and 1 CEU.*" In addition, the names of all RCAF Second World War fatalities are recorded in "*They Shall Not Grow Old - A Book of Remembrance*" by Hayward and Allison (but it is difficult to identify the engineers). A separate book listing those Canadian military engineers who have died in the service of peace with either United Nations or NATO operations is displayed in the CME Museum.

0507. Memorial Database. In addition to the All Sappers Cenotaph and the Books of Remembrance, there are many other memorials around the world that honour the memory and accomplishments of outstanding Canadian engineers and military engineering units. There is an ongoing project to capture information on all such memorials and suggestions for additions to this list should be transmitted to the CMEA at heritage@cmea-acgm.ca. This project works with the DND Directorate of History and Heritage and the Organization of Military Museums of Canada to compile a national inventory of all Canadian military memorials. These memorials can be searched at <http://www.veterans.gc.ca/eng/remembrance/memorials> and new submissions are accepted. Individuals are encouraged to ensure that memorials of which they are familiar are included in this database and to submit details on those that are not included. To further understanding of the contributions and sacrifices of Sappers throughout history, a short description of some of the more prominent and representative memorials are listed below.

Wars and Major Operations

0508. No 2 Construction Battalion. The composition of this unit was unique in that it was an all-black unit with white officers. The unit overcame serious opposition to form in 1916 and was officially disbanded in September 1920. Their story represents a group of determined men who fought racism and discrimination at every turn for the basic right to serve their country. While most soldiers returned home from war as heroes, the men of the Black Battalion did not receive proper recognition until decades later. An engraved stone tablet was dedicated on 10 July 1993 at Market Wharf, Pictou County, NS to mark the site of the original Headquarters, No. 2 Construction Battalion which is now a National Historic Site.

0509. Gibraltar. First World War Commonwealth tunnellers are remembered at the Tunnellers Memorial at Givenchy. The Tunnellers who worked at Gibraltar during the Second World War are memorialized by a Lectern in King's Chapel at Gibraltar that was presented by the Military Engineers Association of Canada.

0510. Dieppe Raid. A memorial to the Royal Canadian Engineers who lost their lives as a

direct result of the raid on Dieppe in 1942 was unveiled on 17 August 1977 in Newhaven, England, their point of departure. The grey stone monument bears the RCE George VI hat badge and the roll of the 27 engineers who died. Of the 5,000 Canadians who took part in this one-day raid, there were 193 casualties among the 335 participating sappers.



Figure 5-4 RCE Fatalities of the Dieppe Raid

0511. In addition, Sappers Bridge, a Bailey bridge on the main arm of the Kettle River (120 kilometres southwest of Kelowna, BC) is named in honour of the sappers who landed at Dieppe. The bridge was dedicated in August 1992 on the 50th Anniversary of the raid. The bridge build was led by 44 Field Engineer Squadron with assistance from 8 Field Engineer Regiment, 6 Field Engineer Squadron, 21 Field Engineer Squadron, 33 Field Engineer Squadron and 409 Engineer Company (US).



Figure 5-5 5th Field Company Normandy Plaque

0512. 1st Field Company. A plaque on Wellington House in Halifax commemorates the members of 1st Field Company, RCE (Permanent Force). The plaque was unveiled on 12 October 1986 by Colonel M.C. Sutherland-Brown, Colonel Commandant. The plaque honours those who were stationed at Wellington Barracks in Halifax 1931-39 and those who served with the 1st Canadian Infantry Division in England, France, Sicily, Italy, and Northwest Europe as 1st Canadian Field Company, RCE, Canadian Active Service Force 1940-45.

0513. 5th Field Company and 6th Field Company. Plaques on the tank BOLD, a Canadian Normandy invasion monument at Courseulles-sur-mer, France bears memorial plaques to the members of 5th and 6th Field Companies who were killed or wounded during the D-Day assault on 6 June 1944.

0514. Operation MARKET GARDEN/Operation BERLIN. This monument in Driel (near Arnhem), The Netherlands, was dedicated on 15 September 1989 to commemorate the Royal Engineer and RCE involvement in Operation BERLIN. During the night of 25/26 September 1944, 20th and 23rd Field Companies bravely helped withdraw, by boat, some 2,500 British and Polish airborne paratroopers across the Neder Rijn River under heavy and continuous enemy fire. As the result of conduct during this operation, Major M.L. Tucker received the Distinguished Service Order, Lieutenant R.J. Kennedy the Military Cross, and Sappers H.D. Thicke, D.J. McCready and R. Lebouthillier received the Military Medal.

0515. The monument consists of a large slab of white granite on which two black granite slabs are mounted, one bearing the RE and RCE badges and the other an image of the operation. The Neder Rijn River, itself, gives its name to the 2 CER Complex that was dedicated in Petawawa in 1997 to remember the exploits of its predecessor unit.



Figure 5-6 Op BERLIN Engineer Memorial

0516. 10th Canadian Field Squadron RCE. On the wall of the Town Hall in the main square in the town of Beselare, in the province of East Flanders, Belgium, there is a plaque in memory of 10th Canadian Field Squadron. The people of Beselare presented this plaque on 7 October 1945 as an expression of the goodwill and admiration to the Canadian soldiers and in memory of the visit of the squadron to that town in March 1945.

Highly Distinguished Engineers

0517. Lieutenant-Colonel C.N. Mitchell, VC, MC, RCE.

The main building of the Canadian Forces School of Military Engineering in CFB Gagetown is named in honour of Mitchell who was the only Canadian engineer to have been awarded the Victoria Cross. As a captain with 4th Canadian Engineer Battalion during the First World War, on the night 8/9 October 1918 during the Canadian attack north of Cambrai, he led an engineer party that disarmed and removed the explosives from the main bridge across the Escout Canal in the face of the enemy and under fire.



Figure 5-8 Mitchell Gardens Cairn

0518. Lieutenant-Colonel Mitchell was also honoured in the naming of the married quarters community in the former CFB Chilliwack. The name “Mitchell Gardens” in metal letters was mounted on a short wall of mortared stones. A plaque dedicated on 12 October 1973 commemorates his contribution to Canada as a gallant soldier during two world wars and his contributions to Camp Chilliwack from 1944 to 1948. With the closure of the base, this memorial cairn was moved to the area of the All Sappers’ Cenotaph.

0519. Sir W.S. Stephenson, CC, MC, DFC. A plaque in the Point Douglas community of Winnipeg, MB honours the outstanding lifetime achievements of Sir William Samuel Stephenson. A plaque at Whitby, ON at the site of the special operations training school at “Camp X” honours his contributions to his Second World War as the man code named “*Intrepid*.”

0520. William Stephenson enlisted as a Canadian Engineer in 1914 and saw action early during the First World War as a signaller with the 101st Battalion of the Canadian Expeditionary Force. Sgt Stephenson was badly wounded during a gas attack and, after recuperating, was commissioned into the Imperial Army and transferred to the Royal Flying Corps. He served with distinction during the war and was decorated several times for conspicuous gallantry and skill with the Military Cross, the Distinguished Flying Cross and the Croix de Guerre.



Figure 5-9 “Camp X” Memorial to Sir William Stephenson

0521. During the Second World War, William Stephenson was appointed Director of British Security Coordination as well as Prime Minister Churchill’s personal representative to President Roosevelt. He was recognized for his services to the Commonwealth during the war years by being knighted in 1945 as well as receiving the United States Presidential Medal for Merit (that country’s highest award for a civilian) and the Order of Canada.

0522. Major-General W.B. Lindsay, CB, CMG. The Lindsay Memorial Trophy was presented to the Military Engineers' Association of Canada by Sapper officers of the First World War and commemorates Major-General Lindsay who was the Chief Engineer (from March 1916 to the end of the First World War) of the first Canadian Corps ever formed. The trophy is a replica of the RCE badge with engineer grenades on the support shoulders. The Lindsay Trophy was first awarded in 1952 and was presented to the Militia unit submitting the best appreciation of a Tactical Exercise without Troops. With the reassignment of many trophies to competitions in 1998, this trophy was retired and is held in the CME Museum.



Figure 5-10 Lindsay Memorial Trophy

0523. Colonel Sir C.S. Gzowski. A Polish engineer, Casimir Stanislas Gzowski emigrated to Canada in 1841 and initially worked in Ontario as a government construction superintendent on highways, roads and bridges. He then formed his own company, which built the Grand Trunk Railway from Toronto to Sarnia (1853- 1857) and the International Bridge across the Niagara River at Fort Erie. He took an active interest in military affairs and, in 1872, was appointed "Staff Officer of the Militia of Canada" as a lieutenant-colonel and Staff Officer to the Engineer Force of the Dominion two years later. In 1879, he was promoted to colonel and appointed Honorary Aide-de-Camp to Queen Victoria and was knighted in 1890. Among his other accomplishments, Colonel Gzowski was the first chairman of the Niagara Parks Commission (1885-1893), was a founder of the Canadian Society of Civil Engineers in 1887, and served as Administrator of Ontario (1896-1897).

0524. In 1885, Colonel Gzowski presented the first recorded Canadian engineer trophies - two silver cups for annual competition among companies of engineers of the Canadian Militia. He is also remembered as an outstanding Canadian engineer on a plaque at the International Bridge at Fort Erie. This plaque was installed in 1973 by the Engineering Institute of Canada and the Professional Engineers of the Province of Ontario on the occasion of the 100th anniversary of the completion of the bridge. Sir Casimir Gzowski is further remembered by a park in Toronto that bears his name.



Figure 5-11 International Bridge at Fort Erie, ON

0525. Sergeant T. Prince, MM. Sergeant Tommy Prince, the most decorated aboriginal Canadian Second World War veteran, began his overseas service as a Sapper with the Canadian 1st Corps Field Park, RCE. The Sergeant Tommy Prince Drill Hall and Tommy Prince Drive in Camp Wainwright, AB as well as the Prince Barracks in CFB Petawawa are named in his memory. A monument to Sergeant Prince is found in Winnipeg, MB at the intersection of Selkirk Avenue and Sergeant Tommy Prince Street.



Figure 5-12 Winnipeg Memorial to Sgt Prince

0526. Returning to Canada after two years overseas with the engineers, Tommy Prince was transferred to the Canadian Parachute Battalion and commenced training with the 1st Canadian Special Service Battalion. After training, he returned to Europe with the Special Service Force that came to be known by the Germans as the "Devil's Brigade." In Italy in early February 1944, during a reconnaissance patrol, Prince was able to penetrate

deep into enemy positions and report for several days. His courage and disregard for personal safety won him the Military Medal. Later, in France in September 1944, Sergeant Prince located the gun sites and encampment area of an enemy reserve battalion. Under most difficult circumstances, he reported back with the information and guided his brigade to capture over a thousand German soldiers. For these acts, he earned the Silver Star, an American Army decoration for gallantry in action.

0527. Sergeant Tommy Prince was decorated by HM King George VI at Buckingham Palace with both the Military Medal and the Silver Star with ribbon on behalf of President Roosevelt. Prince was one of only 59 Canadians who were awarded the Silver Star during the Second World War and only three Canadians of this group also possessed the Military Medal.

0528. Major-General C. Vokes, CB, CBE, DSO, CD. On 27 November 1977, the military weapons ranges at CFB Chilliwack were dedicated in honour of Major-General Christopher Vokes. General Vokes started his career as an RCE officer and, from 1924 to 1938, served in a variety of assignments in training, District Engineer, Works and National Defence Headquarters staff. In December 1939, he was one of the first officers to go overseas where he had a brilliant and highly decorated record of command of Canadian infantry and armoured formations in Sicily, Italy and Northwest Europe.

0529. Late in 1941, he commanded the Princess Patricia Canadian Light Infantry and later the 2nd Canadian Infantry Brigade in the Sicilian landings in July 1943. Upon promotion to Major-General, he commanded the 1st Canadian Division in Italy. Late in 1944, he took command of the 4th Canadian Armoured Division in Holland and was in command at the end of the War. Shortly thereafter, he took command of the 3rd Canadian Division and commanded the Canadian Army Occupational Force in Northwest Europe. After the war, Major-General Vokes was General Officer Commanding Central and Western Commands.

0530. Major-General G.R. Turner, CB, MC, DCM, CD. Turner Street in CFB Gaagetown was named in 1963 for Major-General Guy Roderick Turner. A civil engineer, he enlisted as a private in the First World War in September 1914 and later that year transferred to the 1st Division Engineers and was promoted to sergeant. In 1915, he was awarded the Distinguished Conduct Medal serving as Company Sergeant Major of 3rd Field Company and was commissioned in the field later that year. Subsequently, he was awarded the Military Cross, the bar to the Military Cross and mentioned several times in dispatches. He was twice seriously wounded. Following the war, he accepted a commission in the Permanent Force. During the Second World War, he was the personal representative of General A.G.L. McNaughton on the chiefs of staff of Allied Supreme Command and was one of the organizers of the Canadian Army overseas during the Second World War.

0531. Brigadier-General W.K. Lye, MBE, CD. Lake Lye in the Chilcotin Training Area (near Williams Lake, BC) is named for Brigadier-General William Kirby Lye. Lye was a Royal Military College graduate who went overseas during the Second World War with the 16th Field Company and was later Second-in-Command of 1st Field Company. In England he was also Chief Instructor of the Engineer Reinforcement Unit. He was mentioned in dispatches and appointed a Member of the Order of the British Empire for his distinguished service in 1944 as Staff Officer Royal Engineers, Headquarters 2nd Canadian Corps.

0532. General Lye's post-war appointments include: Commander, Camp Chilliwack and Commandant, Royal Canadian School of Military Engineering; Commander, Nova Scotia and Prince Edward Island Area; Director General Ordnance Systems and Director General Land Operations in Canadian Forces Headquarters. General Lye retired in 1973 after his assignment as Commandant Royal Military College, Kingston.

0533. Staff Sergeant D.G. McLaughlin, MM and Bar, CD. The construction engineering building in CFB Petawawa is named for Staff Sergeant Dennis Gerard (Mike) McLaughlin. A decorated Second World War veteran of 10th Field Squadron RCE, Sergeant McLaughlin was one of only ten Second World War recipients of a Bar to the Military Medal.

0534. During the Italy campaign, when 11 Canadian Infantry Brigade was attacking Coriano Ridge on the nights of 12 and 13 September 1944, Sergeant McLaughlin of 10 Field Squadron RCE, led the opening of two crossings across the Besanics River under heavy mortar and machine gun fire. For this action he was awarded the Military Medal. During the liberation of Holland, on the night of 30 April 1945, at the battle leading up to the attack on Port Delfzijl, again under heavy mortar and machine gun fire, he led his troop in clearing a heavily mined crater on the road near the village of Heveskes. For gallantry under fire, Sergeant McLaughlin was awarded a second Military Medal. After the war, he enrolled again in the RCE and served until 1968, including serving in Korea with 23rd Field Squadron. He retired while serving with No. 3 Engineer Stores Depot in Camp Petawawa.

Towns, Cities, Major Works and Geography

0535. Colonel R.C. Moody. Port Moody, BC is named for Colonel Richard Clement Moody, Royal Engineers, who was appointed Chief Commissioner of Lands and Works and Lieutenant Governor of the new colony of British Columbia in 1858. Moody's role was both to provide military support for the new colony and to carry out the major building projects that were necessary to keep up with the sudden growth in population and commerce largely as a result of the 1858 Gold Rush. Amongst the accomplishments of his sapper contingent were the survey and construction of the Cariboo Wagon Road, exploring and planning the settlement of new towns in the BC mainland, and setting aside a military land reserve for what was to become Stanley Park.

0536. Port Moody was established at the end of a trail that connected New Westminster with Burrard Inlet to defend New Westminster from potential attack from the United States. The town grew rapidly after 1859, following land grants to Moody's Engineers who settled there after the contingent was disbanded in 1863. A plaque on the Port Moody dock remembers Colonel Moody and a plaque in Stanley Park recalls his contribution to the construction of the Cariboo Road.

0537. Lieutenant-Colonel John By. On 14 August 1971, an 11-foot tall bronze statue of Lieutenant-Colonel John By, Royal Engineers was dedicated in Major's Hill Park in Ottawa to recognize the Engineer who founded Bytown and constructed the Rideau Canal in 1826-32.

0538. A second memorial to Lieutenant-Colonel By in Ottawa is the fountain in Confederation Park. This granite fountain originally stood in Trafalgar Square in London, England and its dedication in Ottawa on 5 October 1955 was sponsored by the Engineer Institute of Canada. There is also plaque to Lieutenant-Colonel By located at the Jones Falls lock station along the Rideau Canal.

0539. Canal Builders/Royal Sappers and Miners. In addition to the recognition of Lieutenant-Colonel By's accomplishments in the construction of the Rideau Canal, there are several memorials to the sappers themselves. A sundial behind the East Block of Parliament overlooking the set of locks reminds of the Royal Sappers and Miners. The sundial was used on that site in 1826-27 and was restored in 1919.

0540. A plaque at St. Mary's Cemetery in Newboro, ON recognizes the construction of the



Figure 5-13 Col By Statue

Rideau Canal by the 7th and 15th Companies of the Royal Sappers and Miners. The companies arrived in Bytown and built military structures and locks. The 7th Company was transferred in 1829 to assist in the completion of the canal near Newboro at the Isthmus (the only section beyond Bytown that was built under direct military supervision). There is also a wooden sign at the Old Presbyterian Cemetery in Newboro that recognizes the unmarked graves of Sappers and Miners who laboured under appalling conditions and succumbed to malaria during the years 1826-32. To commemorate the 150th anniversary of the completion of the Newboro Locks, veterans of the 5th Field Company RCE organized the unveiling of a plaque by Lieutenant-General Geoffrey Walsh, CBE, DSO, CD at these locks on 7 August 1982. Additionally, this cemetery was cleaned up, restored and a new memorial stone was emplaced in advance of a dedication ceremony which took place on 19 July 2017 to recognize and remember at least six sappers interred there who gave their lives in the construction of the Newboro Locks.

0541. Including the Rideau Canal, there were a total of eight canals that connected Montreal with Ottawa and Kingston by way of the St. Lawrence and the Ottawa, Rideau, and Cataraqui Rivers. A memorial in Grenville, QC reminds that the Grenville Canal was constructed by the Royal Engineers during 1819-1833 and enlarged some 50 years later. Another memorial in Carillon, QC remembers the Carillon Canal that was constructed between 1826 and 1833 and also enlarged some 50 years later. A memorial in Pointe-des-cascades, QC is dedicated to the memory of the construction of the Soulanges Canal by the Royal Engineers between 1892 and 1899. For centuries, rapids impeded travel on the St. Lawrence River from Cornwall, ON to Valleyfield, QC. The Royal Engineers first attempted to improve the passage by constructing the Ordnance Canals in 1779-1893. These canals were succeeded by the Beauharnois Canal in 1842-1845 and that was, in turn, replaced by the Soulanges Canal in 1892-1899. Today, a section of the St Lawrence Seaway south of Valleyfield bears the name Beauharnois Canal.

0542. Sapper. There are several Canadian geographical names that honour the 'sapper'. Sapperton is a neighborhood of New Westminster, BC that owes its name to the original Royal Engineer camp during the early mapping and development of this part of Canada in the 1860s. The CME's more modern contribution to Canadian mapping is reflected in the naming of mountains in NT as the Sapper Range. Sapper Hill in YT was named to honour the CME involvement in the construction of the Jeckyll Bridge over the Ogilvie River. There is a Sapper Lake in the Chilcotin Training area in BC, a Sapper Hill in the Wainwright Training Area in AB and a Sapper Island near Sault Ste Marie, ON. There is also a Sapper Bridge in Ottawa, a Sappers Bridge near Kelowna, BC, a Sapper Street in New Westminster, Sapper Way in CFB Edmonton, Sapper Road in CFB Shilo and a Rue des Sapeurs in Quebec City.

0543. A 32-foot high "Tin Man" statue weighing five tons stands guard at Westminster Quay in New Westminster, BC in tribute to the Royal Engineers. Unveiled at a public ceremony in 2000, this stylized Royal Engineer figure recognizes the work of the Royal Engineers in founding the first city built in western Canada as well as their laying the foundations for law and order, communication routes, communities and government services in the new colony of BC.

0544. Canada/United States of America Boundary Survey. The plaque on a log cabin in New Westminster, BC on the grounds of 6th Field Squadron reminds of the contributions of the Royal Engineers in the early topographical survey of BC. This building is believed to be the only remaining building of those built in 1860 and 1861 by the Royal Engineers as accommodation during in the clearing and survey of the 49th Parallel to mark of the border between BC and the United States. The log cabin was formally opened in its present location in 2000 by Col. A.F. George, the Joint Honorary Colonel of the Royal Monmouthshire Royal Engineers (Militia).

0545. Military Survey/Mapping and Charting. In recognition of 75 years of military mapping, personnel of the MCE built a cairn during OP ARCTIC 78 overlooking Military Survey Mountain at Latitude N 73° 10' , Longitude W 82° 42' on northern Baffin Island. The brass plate advises: "Military Survey Mountain was named to commemorate the 75th anniversary of the formation of the first Canadian mapping agency and to recognize the contribution of the development of Canada's North by the mappers of the Canadian Armed Forces 1903 – 1978."



Figure 5-14 Royal Engineer Log Cabin

0546. To end the debate of the location of Canada's most northerly point, MCE established Canada's most northern point while conducting OP ARCTIC 87. A survey party established survey station 8759014 on the northern coast of Ellesmere Island with co-ordinates Latitude N 83° 06' 30.8" Longitude W 69° 54' 43.9." The plaque on the cairn overlooking the station reads: "This cairn overlooks Canada's most northern point of land. Established by the Canadian Armed Forces Mapping and Charting Establishment and is dedicated to the military mappers who have contributed to the mapping of Canada."

0547. Military Engineers in Halifax, NS. A plaque commemorating the long association of military engineers with the port, fortress and the City of Halifax was unveiled on 18 June 1966 in Royal Artillery Park by Brigadier J.L. Melville, Colonel Commandant. The tablet, mounted on a six-foot cairn, commemorates the British and Canadian military engineers, major participants in the founding of Halifax in 1749 and its subsequent development.

0548. A second monument, consisting of two Bailey bridge panels mounted on either side of a pair of I-beams, is located in the corner of Royal Artillery Park, closest to the site of the former Royal Engineers Square, downtown Halifax. Unveiled on 24 September 1995, it commemorates the Royal Engineer contribution to the founding of Halifax and the 250-year continuous presence of military engineers in that city.

0549. Major-General Sir E.P.C. Girouard, KCMG, DSO. A Royal Military College graduate in the class of 1886, he was commissioned in the Royal Engineers and was appointed the Director of Railways in the Egyptian Army. He became President of the Egyptian State Railways, subsequently Director of Railways to the British Forces in South Africa, Commissioner of Railways, South Africa, High Commissioner and Commander-in- Chief of Northern Nigeria, and Governor and Commander-in-Chief, East Africa Protectorate. The highest peak in Banff National Park, Mount Girouard, was named for him in 1904. A plaque unveiled in 1951 at 546 Sherbrooke Street West, Montréal QC honours him as a military engineer and builder of railways in Africa. Finally, in 1976 the building which houses the Departments of Mathematics, Political Science and Economics of the Royal Military College, Kingston was named after Major-General Girouard.

0550. Maj A. Taylor. Taylor Valley in Victoria Land in the Antarctic (Latitude S 77° 37'; Longitude. E 163° 03') is named for Major Andrew Taylor, an RCE officer. Captain Taylor had been seconded to the Royal Navy's Operation TABARIN in the Antarctic during the Second World War when they needed a surveyor accustomed to working in a cold climate. The aim of this operation was to build up the British presence on the Antarctic continent and Capt Taylor led the shore party that established Hope Bay as the main base of activity for the eastern Antarctic Peninsula. Recipient of the Silver Polar Medal from the British Government, Capt Taylor is the only Canadian known to have commanded an expedition in Antarctica.

0551. Geographer, historian, author and polar scholar, Andrew Taylor O.C., CD, Ph.D., D.Sc.,

D.L.S. was a pioneer in the development of the science of arctic engineering under permafrost conditions while serving as senior Canadian engineer during the construction of the Distant Early Warning (DEW) Line radars. Taylor was granted an honorary doctorate in recognition of his pioneering work as a polar engineer, geographer, and historian and was appointed an Officer in the Order of Canada.

0552. Lt-Col G. S. Andrews CM, MBE, OB., B.Sc., D.Eng., P.Eng., F.R.G.S, BCLS, RPF. A mountain in BC is named for Gerald Smedley Andrews who laid the foundation for British Columbia's mapping service as Surveyor General and Director of Surveys and Mapping. As a young man he worked for the BC Forest Service and then undertook post-graduate studies in aerial photogrammetry at Oxford and Dresden, Germany. With the onset of WW II he offered his extensive experience in aerial photography and was eventually assigned to 1 Canadian Corps Field Survey Company. One of his greatest accomplishments involved preparations for Operation OVERLORD, the Invasion of Europe, where his unit computed and compiled the profiles of some 20 miles of the potential assault beaches centred on Arromanches. After the war he first served as Chief Air Survey Engineer for British Columbia and then laid the foundation for British Columbia's mapping service.

0553. Warrant Officer II T.C. Poelzer. On 4 September 1949, WO II Thomas C. Poelzer fell to his death while a member of an Army Survey Establishment survey party descending a mountain from Survey Station Sheep in the Cassiar District of BC. On 6 May 1954, a 2,169-metre peak three kilometres north-west of the accident site was named Mount Poelzer.

0554. Private W.P. Scherle. Scherle Peak, 190 kilometres north of Vancouver in the Coastal Range in British Columbia (50° 52' 1" N, 123° 9' 19" W) is named for Private William P. Scherle who was killed in a helicopter accident on 7 July 1970 while on a surveying mission. This 2,743-metre peak overlooks the accident site and was named Scherle Peak on 30 December 1970.

Service and Sacrifice Memorials

0555. Colonel, The Honourable F.G. Hood, RE. The present Base Construction Engineering building at CFB Esquimalt is situated on the former site of the headquarters of the Royal Engineer 48th Submarine Mining Company. A bronze plaque honours Colonel Hood, the commanding officer from 1902 to 1906.

0556. Lieutenant-Colonel C.H. Smith. A classroom in the School of Military Mapping in Ottawa is named for Lieutenant-Colonel C.H. Smith, the first Commanding Officer of the Army Survey Establishment. Second-Lieutenant Smith was commissioned in the 1st Field Survey Company (Militia) in 1937 and joined the company overseas in 1940. In 1943 he commanded 3 Field (Reproduction) Company and, later that year, became Deputy Assistant Director of Surveys, 1st Canadian Army. In December 1940 he was seconded to Royal Navy Headquarters, 21st Army Group, as Deputy Assistant Director of Surveys and held that position until the end of the war.

0557. After the war he commanded 1st Field Survey Company, led its transformation into the Army Survey Establishment and was Director of Military Survey in from 1946 to 1962. During these years the Army Survey Establishment mapped about one third of Canada and Colonel Smith became an international authority on surveying and mapping. After retirement, Colonel Smith worked in private enterprise and with the United Nations to implement national mapping programs in Pakistan, Bolivia, the Sudan, Liberia, Manila, Bolivia, and Iran. He was awarded the Massey Medal of the Royal Canadian Geographical Society in 1968 for his contribution to the improvements of mapping and charting techniques in Canada.

0558. Sergeant J.L. Hickman, RCE. A monument based on a Bailey bridge panel was erected in The Netherlands to honour Sergeant J.L. Hickman of 6th Field Company. After the offensive of the Westerschelde in Holland in October 1944, the Canadians fought an exhaustive battle in the polders of Zeeuwsch-Vlaamse and along the dikes in the direction of the Belgian border and Knokke-Heist. On 31 October 1944, 6th Field Company was involved in the clearance of the Breskens Pocket in Holland and bridged the Uitwaterings Canal at Retranchement under the leadership of Sergeant Hickman, under heavy artillery fire. Later that day, he was mortally wounded. In tribute to him and his comrades, a bridge in this location was dedicated in his name on 30 October 1986. The monument was adopted by the children of the local school.



Figure 5-15 Sgt Hickman Bridge

0559. Sergeant I. Stark, RCE. The Sergeant Ivan Stark Mine Awareness Training Area in CFB Kingston was dedicated to honour him on 26 May 2000. As a member of the United Nations Emergency Force on 27 September 1957, he became the first peacekeeper killed by a mine on United Nations duty in Egypt.

0560. Sergeant C.M. Ralph. The Sergeant Cornelius Michael Ralph Bridge in CFB Galetown honours Sergeant Ralph and a plaque is mounted on a near-by cairn. Sergeant Ralph of 22 Field Squadron was killed on 17 August 1992 by a landmine during operations – the first United Nations Protection Force soldier killed in Operation HARMONY. The original monument in Daruvar Croatia bearing a bronze plaque denoting the circumstances of the incident has been lost.



Figure 5-16 Sgt Ralph Memorial Cairn

0561. Master Corporal M. Isfeld. The “Mark R. Isfeld Secondary School” in Courtenay, BC is named for Master Corporal Mark Robert Isfeld. This is believed to be the first time that a school has been named after a Canadian peacekeeper. Master Corporal Isfeld was killed on 21 June 1994 by a mine while serving with the United Nations Protection Force in Bosnia. A minefield clearing project near Bila Vlaka village is named in his memory as is the Izzy Bridge in the Creston Wildlife Centre, near Creston, BC. His memory is further perpetuated in 1 Combat Engineer Regiment through the Isfeld Memorial Trophy.



Figure 5-17 Izzy Bridge

0562. Corporal J.M. Hendry, GC. In August, 2008, a memorial cairn honouring Corporal Hendry was unveiled at Loch Laggan. An RCE tunneller, Corporal Hendry was working on wartime tunnelling at Loch Laggan, Scotland. He attempted to extinguish a powder house fire but was killed in the resulting devastating explosion. He was posthumously awarded the George Cross for his devotion to duty and disregard of his own safety. This was only the second George Cross won by a member of the Canadian Army. The Range Control building in Meaford, ON is also dedicated to Corporal Hendry.

0563. Sapper J.G.S. Desmarais. A member of 2 Combat Engineer Regiment, Sapper Gilles Desmarais was killed in a construction accident on 25 September 1998 while participating in

Operation PALLADIUM. His name is recorded on a monument in Velika Kladusa, Bosnia-Herzegovina, as well as on a memorial stone monument outside the 2 Combat Engineer Regiment headquarters building in CFB Petawawa.

0564. Sapper C.G. Holopina. A concrete monument outside Bihac, Bosnia bears an embedded CME badge and honours Sapper Christopher Gregory Holopina. A member of 2 Combat Engineer Regiment, Sapper Holopina was killed in a vehicle accident on 4 Jul 1996 while participating in Operation ALLIANCE. Sapper Holopina and his comrades were on their way to help rescue a group of British soldiers who were stranded in a minefield when, to avoid an accident, their Bison left the road and rolled down a ravine. Sapper Holopina lost his life when the vehicle rolled over. He was the first Canadian soldier to lose his life in Bosnia under NATO command.



Figure 5-18 Sapper Holopina Memorial

0565. Camp Holopina in Bosnia was named after him on 4 July 1997 but closed down in 1999. His name is also recorded on the Canadian monument in Velika Kladusa, Bosnia-Herzegovina, on a memorial stone monument outside the 2 Combat Engineer Regiment building in CFB Petawawa as well as on the Cenotaph in St Claude, MB. A Manitoba native, the Province of Manitoba has honoured Sapper Holopina by naming Holopina Lake in the Flin Flon area after him (Latitude N 55° 05' 32"; Longitude W 101° 39' 48"). The Holopina Chapter of the Canadian Association of Veterans in UN Peacekeeping in the Shilo/Brandon, MB area also bears his name.

0566. Slesse Demolition Range Accident. A plaque to the memory of the casualties of the June 1988 demolition accident at the CFB Chilliwack Slesse Range is displayed inside the main entrance to the Canadian Forces School of Military Engineering. The memorial plaque is inscribed: "In memory of Captain J.W. Best, Lieutenant M.D. Aucoin, Second Lieutenant K.J. Wilkinson, Officer Cadet K.R. Gawne, Officer Cadet W.C. Sutton, Officer Cadet W.J. Whitley; killed in a demolitions training accident at Slesse Range 20 June 1988." In addition, there is a willow tree at the Royal Military College, Kingston that is dedicated to Officer Cadet K. Gawne and a small arms competition trophy in 3 Field Engineer Squadron remembers Second Lieutenant K.J. Wilkinson.

0567. Construction Engineering. The "Spirit of Construction Engineering" monument is located in front of the Hood building, in the dockyard at CFB Esquimalt. It serves as memory to 100 years of CME service to Canada. The memorial was constructed by a team of sheet metal workers, painters, carpenters, plumbers, electricians, gardeners and municipal workers from the Construction Engineering Section. The monument was unveiled by the Lieutenant Governor of BC, The Honourable Iona Campagnolo, on 31 March 2003.



Figure 5-19 "Spirit of Construction Engineering"

0568. Canadian Forces Fire and CBRN Academy. A memorial at the Canadian Forces Fire and CBRN Academy in CFB Borden is based on CP 4500 Aircraft Rescue Fire Fighting Vehicle that was donated to the Fire Academy by Waltek Motor Trucks in 1999.

Distinguished Civilians

0569. Gaspard Chaussegros de Léry. A plaque near the Porte St Louis of the fortified part of Québec City was dedicated in 1992 by the Canadian Society of Civil Engineering as a tribute to Gaspard Chaussegros de Léry, the third "King's Engineer" in New France 1716 - 1756. A

building at Collège Militaire Royal, Saint-Jean bears his name. Highlights of his career include planning the outer stone wall of Montreal's fortifications as well as planning Fort Niagara and Fort Saint-Frédéric. In addition, he supervised work on Québec's fortifications, designed two naval shipyards in Québec City, several churches, the Episcopal Palace and the façade of the Québec Cathedral.

0570. Eugene-Etienne Taché. The headquarters building of the Construction Engineering section of CFB Valcartier is named for Eugene-Etienne Taché (1836-1912), a renowned Quebec engineer, architect and surveyor. Taché is remembered primarily for his concept, design and construction of many public buildings and other monumental works in Québec. Earlier in his career of public service, while with the Department of Public Works, he worked on the Ottawa Canal. He is also famous for a map of the Province of Quebec he later drew up with the Department of Crown Lands. As an architect, noteworthy endeavours of Taché are the Québec National Assembly building including his design of the Quebec Coat of Arms and the motto "Je me souviens" that is credited to him. Other major works include the Grande-Allée military armoury (also known as the Voltigeurs de Québec Armoury, the Provincial Court Building, "Le Cercle de la Garnison" (at the foot of the Citadel and formerly the Garrison Club), as well as several memorial arches and memorials. In 1903, King Edward VII named Taché a Companion of the Imperial Service Order in recognition of his outstanding career of public service.