



# Sabretache

THE OFFICIAL  
JOURNAL OF  
THE CALGARY MILITARY HISTORICAL SOCIETY

June 2016

## The *Wehrmacht-Einheitskanister* also known as the Jerrycan

During World War II the United States exported more tons of petroleum products than of all other war materiel combined. The mainstay of the enormous oil and gasoline transportation network that fed the war was the oceangoing tanker, supplemented on land by pipelines, railroad tank cars, and trucks. But for combat vehicles on the move, another link was crucial—smaller containers that could be carried and poured by hand and moved around a battle zone by trucks.

Hitler knew this. He perceived early on that the weakest link in his plans for blitzkrieg using his panzer divisions was fuel supply. He ordered his staff to design a fuel container that would minimize gasoline losses under combat conditions. As a result the German army had thousands of jerrycans, as they came to be called, stored and ready when hostilities began in 1939.

The jerrycan had been developed under the strictest secrecy, and its unique features were many. It was flat-sided and rectangular in shape, consisting of two halves welded together as in a typical automobile gasoline tank. It had three handles, enabling one man to carry two cans and pass one to another man in bucket-brigade fashion. Its capacity was approximately five U.S. gallons; its weight filled, forty-five pounds. Thanks to an air chamber at the top, it would float on water if dropped overboard or from a plane. Its short spout was secured with a snap closure that could be propped open for pouring, making unnecessary any funnel or opener. A gasket made the mouth leak-proof. An air-breathing tube from the spout to the air space kept the pouring smooth. And most important, the can's inside was lined with an impervious plastic material developed for the insides of steel beer barrels. This enabled the jerrycan to be used alternately for gasoline and water.

Early in the summer of 1939, this secret weapon began a roundabout odyssey into American hands. An American engineer named Paul Pleiss, finishing up a manufacturing job in Berlin, persuaded a German colleague to join him on a vacation trip overland to India. The two bought an automobile chassis and built a body for it. As they prepared to leave on their journey, they realized that they had no provision for emergency water. The German engineer knew of and had access to thousands of jerrycans stored at Tempelhof Airport. He simply took three and mounted them on the underside of the car.



### CMHS Meeting

The next CMHS meeting will be held on

**Tuesday,  
June 21st.  
2016**

**7:00 pm**  
At the  
Petty Officers' Mess  
HCMS Tecumseh

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CALGARY MILITARY HISTORICAL SOCIETY

The  
CALGARY MILITARY HISTORICAL SOCIETY  
is a non-profit registered society  
which fosters the study of the

military and the police, and the heritage of  
Canada, the British Empire, and the world  
as well as the preservation of military  
artifacts and records.

The CMHS meets once every calendar month  
at: Petty Officers' Mess  
HMCS Tecumseh  
1820 - 24th Street SW  
Calgary AB T2T 0G6

## Notice of Next Meeting

The next CMHS meeting will be held on  
**Tuesday, June 21st, 2016,**  
**19:00 (7:00 pm)**

At the Petty Officers' Mess, HMCS Tecumseh.

Members are reminded that an offering of foodstuffs for the Legion Food Bank is considered your unofficial entrance fee to our regular scheduled meetings.

The unofficial agenda of this meeting will be:

Introduction of guests, Minutes of last meeting Correspondence, Membership report Treasurer's report, Old business / New business Break, Show & Tell  
The President, **Kevin Roberts** would like to invite everyone to remain after the meeting for an informal time of fellowship.

The two drove across eleven national borders without incident and were halfway across India when Field Marshal Goering sent a plane to take the German engineer back home. Before departing, the engineer compounded his treason by giving Pleiss complete specifications for the jerrycan's manufacture. Pleiss continued on alone to Calcutta. Then he put the car in storage and returned to Philadelphia.

Back in the United States, Pleiss told military officials about the container, but without a sample can he could stir no interest, even though the war was now well under way. The risk involved in having the cans removed from the car and shipped from Calcutta seemed too great, so he eventually had the complete vehicle sent to him, via Turkey and the Cape of Good Hope. It arrived in New York in the summer of 1940 with the three jerrycans intact. Pleiss immediately sent one of the cans to Washington. The War Department looked at it but unwisely decided that an updated version of their World War I container would be good enough. That was a cylindrical ten-gallon can with two screw closures. It required a wrench and a funnel for pouring.

That one jerrycan in the Army's possession was later sent to Camp Holabird, in Maryland. There it was poorly redesigned; the only features retained were the size, shape, and handles. The welded circumferential joint was replaced with rolled seams around the bottom and one side. Both a wrench and a funnel were required for its use. And it now had no lining. As any petroleum engineer knows, it is unsafe to store gasoline in a container with rolled seams. This substitute can did not win wide acceptance.

The British first encountered the jerrycan during the German invasion of Norway, in 1940, and gave it its English name (the Germans were, of course, the "Jerries"). Later that year Pleiss was in London and was asked by British officers if he knew anything about the can's design and manufacture. He ordered the second of his three jerrycans flown to London. Steps were taken to manufacture exact duplicates of it.

Two years later the United States was still oblivious of the can. Then, in September 1942, two quality-control officers posted to American refineries in the Mideast ran smack into the problems being created by ignoring the jerrycan. **Richard Daniel, US Naval Reserve** was one of those two. He states; Passing through Cairo two weeks before the start of the Battle of El Alamein, we learned that the British wanted no part of a planned U.S. Navy can; as far as they were concerned, the only container worth having was the Jerrycan, even though their only supply was those captured in battle. The British military were bitter; two years after the invasion of Norway there was still no evidence that their government had done anything about the jerrycan.



The unique design allows 2 cans carried by 1 person, 3 cans to be carried by two people or passed bucket brigade style.

## Minutes of the last meeting

Minutes of the meeting of the **Calgary Military Historical Society**

**Meeting held on May 17th, 2016 at the Petty Officer's Mess, HMCS Tecumseh**

Meeting called to order by President Kevin R. at 7:10 PM with 24 members in attendance. No Guests  
**Minutes** of previous meeting. Discussed and call for approval by Mikey C. Seconded by Bob McP.

**Newsletter.** Discussion of story

**Membership.** Report by the humble membership secretary. Membership totals 49members.

**Treasures Report.** Provided by our esteemed treasurer Mr. Floyd S. Lists of monies collected from book auctions, donations etc. Listing of expenditures. Treasure Floyd S. moves that his report be accepted as reported. Seconded by Member Mike C. Unanimous

**Correspondence.** City of Calgary looking for nominations for Volunteer awards. Lions looking for nominations for History Award for Heritage.

### Old Business

Pres. Kevin R. reports on societies new Facebook page. Up and running. Articles contributed and has link to our website. Member Indro R. helping to set up.

Member Allan discusses members attending a special showing at the Military6 Museum. Vic Taboika has agreed to host at least 14 members or more. Discussion follows and members suggest that we hold our next meeting (June 21) there and view exhibit. Details will need to be arranged with Vic and the Museum. Email Announcement will confirm if this works out.

**New Business-** Member Mike C. tells member of discovery of 400,000 old WW1 photos in barn attic in France. Here is the web site

<http://www.bbc.co.uk/programmes/articles/3LVxjjZghNQW2LJhx1SsX0t/the-lost-tommies>

Member Indra R. asks if our Facebook site will be open or closed. Kevin M. states that it will be closed and reasons for this.

Member Floyd S. states that he has access to body forms for uniforms etc. Contact him for information

Member President Kevin R. states that he will soon be moving to Medicine Hat. Will keep us informed of timing etc. Kevin donates 3 books to be given away.

### Show and Tell.

Kevin R.—1916 Ammo Pouch Berlin made but unable to identify.

Al R. – Calgary Highlander collection of soldier Ernest Marsden.

Al D.—Stories of naval ribbons worn on sailors hats during the war.

Alan McK.—Father (who lived in Republic of Ireland) but went to Northern Ireland to join British Army. Royal Fusiliers. Pictures of family in military. POW souvenirs and ID cards.

Bob McP.—Frame of various French Croix-Guerre medals. Frame of Vichy French Croix-Guerre medals. Frame of French Legion of Honour Medals Civilian and Military.

Frank—Book salvaged from garbage bin. History of 78th overseas Battalion Winnipeg Grenadiers 1916

Mike C. welcome home medallions South Africa. Boer War badges for Gallantry. Badges and pictures of South African Constabulary.

Stuart E.—City directory 1960

John E.— story of RCMP family member. History and medals awarded uniforms etc. given to him.

Brian H.—Discusses his collecting of Arm Bands both wars. Shows item.

Garry—Discusses Display at Gun Show , has pictures of display. Discusses Research on internet and his successes.

Reed. Books on special forces. Discusses his interest.

Darrel K.—Calgary Highlanders Challenge Coins and badges Scully made.

Bob McP. Discusses Challenge coins. Dave L. states that they came out in Vietnam War to encourage Regimental loyalty.

James B.—comments on arrival of T34 Tank at Museum.

Jack D. 1945 July Digest article on Japanese cannibalism, Joseph Stalin and Russian military.

Al R.—German M42 Cap and RCAF Patch.

Motion to Adjourn. By Dave L. . and seconded by everyone.

**Jerrycan Story submitted by Member  
Brian H.**



**Richard M. Daniels further states:** My colleague and I learned quickly about the jerrycan's advantages and the Allied can's costly disadvantages, and we sent a cable to naval officials in Washington stating that 40 percent of all the gasoline sent to Egypt was being lost through spillage and evaporation. We added that a detailed report would follow. The 40 percent figure was actually a guess intended to provoke alarm, but it worked. A cable came back immediately requesting confirmation.

We then arranged a visit to several fuel-handling depots at the rear of Montgomery's army and found there that conditions were indeed appalling. Fuel arrived by rail from the sea in fifty-five-gallon steel drums with rolled seams and friction-sealed metallic mouths. The drums were

handled violently by local laborers. Many leaked. The next link in the chain was the infamous five-gallon "petrol tin." This was a square can of tin plate that had been used for decades to supply lamp kerosene. It was hardly useful for gasoline. In the hot desert sun, it tended to swell up, burst at the seams, and leak. Since a funnel was needed for pouring, spillage was also a problem.

Allied soldiers in Africa knew that the only gasoline container worth having was German. The "Petrol Tins" were carried on Liberator bombers in flight. They leaked out perhaps a third of the fuel they carried. Because of this, General Wavell's defeat of the Italians in North Africa in 1940 had come to naught. His planes and combat vehicles had literally run out of gas. Likewise in 1941, General Auchinleck's victory over Rommel had withered away. In 1942 General Montgomery saw to it that he had enough supplies, including gasoline, to whip Rommel in spite of terrific wastage. And he was helped by captured jerrycans.

The British historian Desmond Young later confirmed the great importance of oil cans in the early African part of the war. "No one who did not serve in the desert," he wrote, "can realise to what extent the difference between complete and partial success rested on the simplest item of our equipment—and the worst. Whoever sent our troops into desert warfare with the [five-gallon] petrol tin has much to answer for. General Auchinleck estimates that this 'flimsy and ill constructed container' led to the loss of thirty per cent of petrol between base and consumer. ... The overall loss was almost incalculable. To calculate the tanks destroyed, the number of men who were killed or went into captivity because of shortage of petrol at some crucial moment, the ships and merchant seamen lost in carrying it, would be quite impossible."

**Richard M. Daniels continues.** After my colleague and I made our report, a new five-gallon container under consideration in Washington was canceled. Meanwhile the British were finally gearing up for mass production. Two million British jerrycans were sent to North Africa in early 1943, and by early 1944 they were being manufactured in the Middle East. Since the British had such a head start, the Allies agreed to let them produce all the cans needed for the invasion of Europe. Millions were ready by D-day. By V-E day some twenty-one million Allied jerrycans had been scattered all over Europe. President Roosevelt observed in November 1944, "Without these cans it would have been impossible for our armies to cut their way across France at a lightning pace which exceeded the German Blitz of 1940."

In Washington little about the jerrycan appears in the official record. A military report says simply, "A sample of the jerry can was brought to the office of the Quartermaster General in the summer of 1940."



Rack of Jerrycans on the back of armoured vehicle