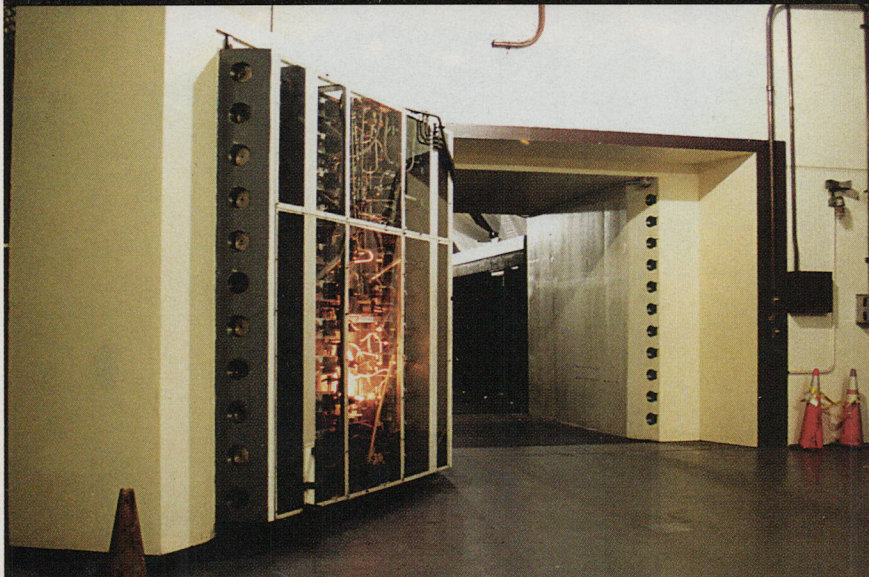


INSIDE NORAD

by Ray Dick



It's a short flight from Denver, Colo., to Colorado Springs, and at first glance there is little to indicate that this community nestled on the eastern edge of the Rocky Mountains is anything but a popular destination for tourists to experience the attractions of this high desert country.

But a different scene unfolds as the plane loses altitude to land at this expansive and ultra-modern civilian airport. On the southern outskirts is the busy Peterson Air Force Base, headquarters for Norad, the joint Canada-U.S. aerospace defence command, the U.S. Northern Command and the Bi-national Planning Group of defence experts.

To the south looms the legendary Pike's Peak, its top mantled with snow on this day in early July. On the northern outskirts, less obvious and difficult to find among the many peaks of the Rockies that stretch north into Canada, is Cheyenne Mountain, an ultra security-minded bastion that inside granite walls houses the population of a small town.

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It was here that the drama of Sept. 11, 2001, unfolded with special significance as the terrorist attacks on New York and Washington killed more than 2,000 people. Although secure inside their mountain cave—a fortress built to withstand a Cold War nuclear strike—it is a day the Canadians and Americans here will never forget.

It is an especially memorable day for Lieutenant-General Eric (Rick) Findley, an Ottawa native who now is second in command at Norad.

He was on duty in Cheyenne Mountain that day, just about to finish a 12-hour shift. The Mountain at that time was exercising its full range of monitoring activities, including some strategic exercises and keeping an eye and ear on a Russian operation that was moving its bombers to a northern area. "The first information we got was that there was an aircraft hijacking in the northeast sector," said the general. "And the first visuals we got (from the television) was of the damage to the first of the twin towers in New York. About that time an aircraft hit the second tower and we realized it was not an accident but a co-ordinated attack." Norad went to battle status, ordered aircraft scrambled and set up air patrols.

There was no panic or shock in the Mountain—a situation he attributes to good training and good reaction. But it turned into a long day's work for the general. "I tried to put my head down, and perhaps I did for about an hour, but I couldn't get those images (of the planes crashing into the twin towers) out of my head. On the ride home all I wanted to do was listen to some music, but there was no music on the car radio, just commentaries and news programs on the terrorist attacks. And there were planes roaring overhead."

When he turned into the driveway of his Colorado Springs home a neighbour came out to meet him. "She grabbed me, gave me a big kiss, and said 'thanks for being here'. Inside, my wife also had a big welcome waiting."

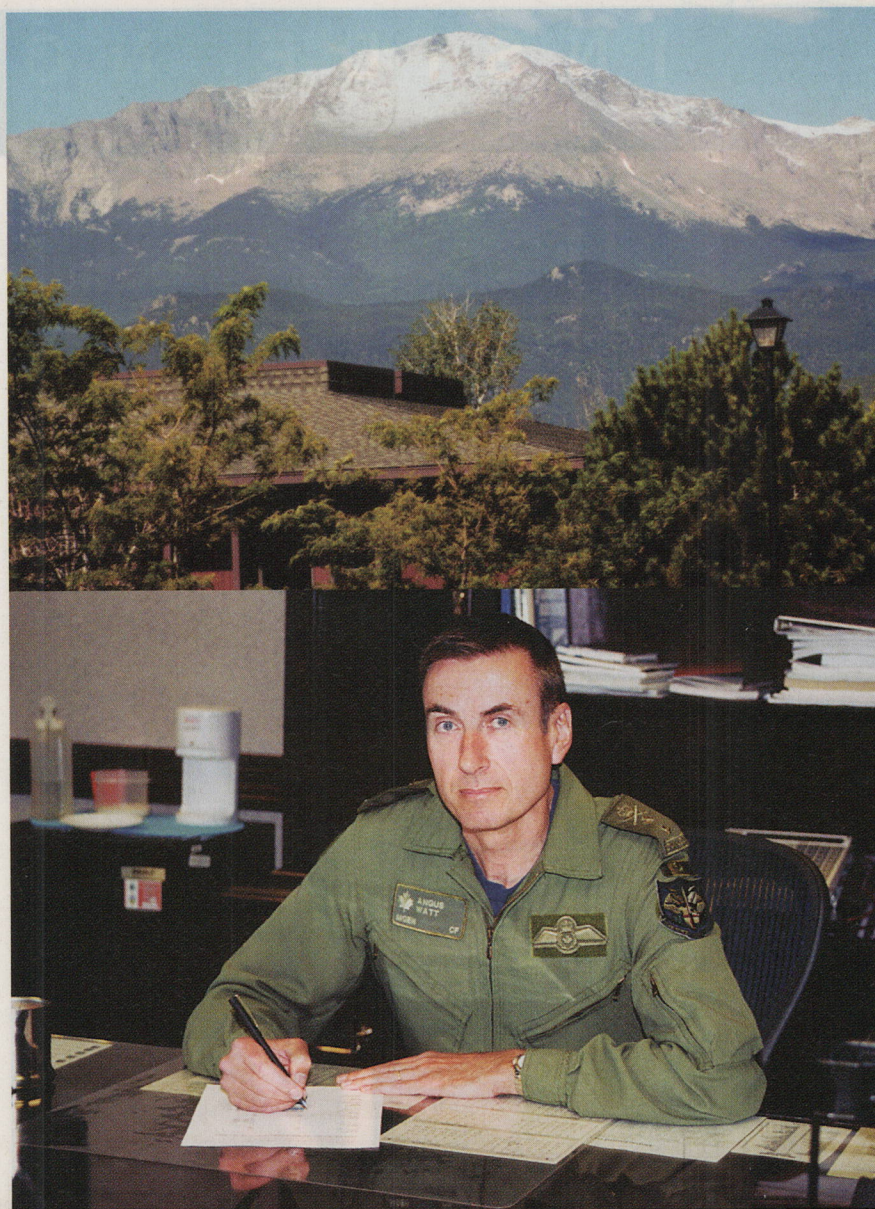
It was a peaceful end and a reality check for the general after a marathon shift in the Mountain and the unexpected horrific and shocking terrorist events that cost thousands of civilian lives when airliners crashed into buildings in New York, Washington and in a field in Pennsylvania.

Norad, the North American defence

entity created in 1958 at the height of the Cold War to monitor North American aerospace for nuclear attacks from the Soviet Union, was caught by surprise and unprepared for 9/11. While Cheyenne Mountain's eyes and ears were focused almost exclusively on possible foreign threats from long-range bombers, intercontinental ballistic missiles and foreign aircraft hijackings, it was not prepared for the possibility of a co-ordinated terrorist attack in domestic aerospace. "The feeling was total disbelief," says Master Corporal Daniel Milne, a Canadian from St. Catharines, Ont., and the emergency action controller on duty in the

Mountain that day. "Then the phones started ringing like crazy. I could not believe that we were under attack."

To Findley, however, who was awarded the Meritorious Service Cross for his action on 9/11 to go along with his other awards as Commander in the Order of Military Merit and for NATO and United Nations peacekeeping duties, this was just another day in the life of Norad. "If you look back over the past 45 years and see what Norad was in the beginning and what the threat was perceived to be, and what Norad was structured to deal with compared to what it has become today, you see an organization that has continued to



PHOTOS: RAY DICK

Opposite page, from top: The entrance to Norad's nerve centre inside Cheyenne Mountain in Colorado; steel blast doors protect steel buildings mounted on springs. This page, from top: Pike's Peak looms over Colorado Springs; Canadian Maj.-Gen. Angus Watt.

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evolve and adapt to whatever the threat is," he said. Sept. 11 was no different, except for the thought that the unthinkable had occurred.

"We adapted quickly throughout that day and the days afterward," he said.

On Sept. 11, 2001, Norad had 20 aircraft on alert, including two in Alaska, four in Canada and 14 in the U.S. By the end of the day, hundreds of aircraft were in the skies throughout Canada and the U.S., and since then Norad has flown more than 32,000 sorties, diverted air patrols or scrambled fighters on more than 1,500 occasions. The mission for Norad has evolved and increased. New alert sites had been set up and inter-agency co-ordination improved.

"The terrorist attacks...were a call to arms," said General Ralph Eberhart, the commander of Norad and U.S. Northern Command, in a statement from headquarters at Peterson Air Force Base in response to a national commission report on 9/11. "Thousands of innocent men, women and children lost their lives, while many others were injured. We must not let that happen again."

What this amounts to is the evolution of Norad, this Canadian-American defence group responsible for protecting the airspace of two vast countries—from Alaska to the Florida Keys and from St. John's, Nfld., to San Diego, Calif. Thousands of U.S. and Canadian military members have worked for more than 45 years to shield North America from the early Cold War threat from Soviet bombers to the evolving threats of missile attacks from space and terrorism from the air.

Describing itself as three regions, two countries, one team, Norad, with headquarters in Colorado Springs and its key action centre in Cheyenne Mountain, has three main operational areas—the Alaskan region (ANR) from Elmendorf Air Force Base near Anchorage, the Canadian region based in Winnipeg and North Bay, Ont., (CANR) and the Continental U.S. region defence sector at Tyndall AFB in Florida.

The Canadian Norad region headquarters at CFB Winnipeg is responsible for providing surveillance and control of the Canadian airspace, and the Canadian Forces Air Command through control centres for east and west sectors located in North Bay routinely provides tracking data, censor status and aircraft alert status to Norad headquarters. It is a 24-hour-a-day, seven-day-a-week responsibility to provide combat ready air forces to meet Canada's commitments to the defence of North America and to maintain the sovereignty of Canadian airspace.

The pointy end of that commitment to

Norad is made up of the four squadrons of CF-18 fighter aircraft, the 441 and 416 tactical fighter squadrons at CFB Cold Lake, Alta., and 425 and 433 squadrons at CFB Bagotville, Que.

And another sign of the evolution of Norad is that since 1991 more and more focus has been placed on the detection and monitoring of aircraft suspected of illegal drug trafficking. In co-operation with the RCMP and U.S. drug law enforcement agencies, the Canadian Norad region monitors all aircraft approaching the coast of Canada. Any that has not filed a flight plan may be directed to land and be inspected by the RCMP and Customs Canada.

Then came 9/11, and what Eberhart describes as the wake-up call, and since then changes and improvements have been implemented by Norad along with defence and other government agencies to more quickly and ably respond to threats against North America. "Improvements include increased air patrols over the U.S. and Canada, looking both inside and outside our borders at potential threats," says Michael Perini, director of public affairs of Norad and U.S. Northern Command. "This also includes a greater number of fighter response locations around the U.S. and Canada; rules of engagement for response to domestic airborne threats; and enhanced communications with U.S. government inter-agency partners to ensure rapid response during real-world situations."

It was another Canadian, however, who was on the firing line for 9/11. Maj.-Gen. Angus Watt, who grew up in Ottawa, is director of operations at Norad headquarters at Peterson AFB. Responsible for running the everyday business of Norad, he was "one of the first guys they called."

"There is no way Norad could claim it succeeded in 9/11," said Watt. "But we can't say it was a failure either." No one had anticipated such terrorist actions and "we regret we didn't succeed in stopping the attacks." Since improvements to Norad's operational posture, the general is confident the results would be different now. "We have run scenarios with our current operating posture," he says, adding he was confident "we could have shot down all of those planes."

Another evolution due to 9/11 was the addition of U.S. Northern Command in 2002, also commanded by Eberhart from Peterson AFB and including a couple of Canadian liaison officers. The mission is homeland defence and civil support, specifically to:

- Conduct operations to deter, prevent and defeat threats and aggression

aimed at the U.S., its territories and interests within the assigned area of responsibility.

- As directed by the president or secretary of defence, provide military assistance to civil authorities.

"To that end, Norad has strengthened its ability to detect, assess, warn and defend against threats to North America," said Perini. "Surveillance and control of U.S. and Canadian airspace remain critical components of our national security strategy."

Another offshoot in bilateral defence planning after 9/11 was an agreement between Canadian and U.S. officials to set up the Bi-National Planning Group (BPG) at the Norad complex at Peterson AFB as sort of a neighbourhood watch program to deal with threats in the new security environment. "The environment has changed fundamentally," says Findley, who is head of the BPG as well as deputy commander of Norad. The sharing of information and intelligence among all defence and security players is the cornerstone of North American defence, he adds, and points out that a country would have difficulty setting up homeland defence without understanding what its neighbours are up to.

The group, set up in December of 2002, has about 30 Canadians and Americans in its ranks. Its activities include: Preparing contingency plans for military assistance in the event of a threat, attack or civil emergency in either country; co-ordinating maritime surveillance and intelligence sharing and assessing such threats, establishing planning and liaison mechanisms with civilian authorities such as police and firemen involved in crisis response; designing and participating in exercises; and conducting joint training programs. "The BPG is an excellent test-bed for the deliberate planning required to the new security environment," adds Findley.

The test-bed, and the focal point of world attention, during the terrorist crisis of 9/11, however, was on nearby Cheyenne Mountain, Norad's command and control operations centre. Built in the 1960s, the \$142-million mountain enclave was designed to ensure a 70 per cent probability of continuing to function against a five megaton weapon and as protection against fallout and biological and chemical warfare. The 5.1-acre excavation with 2,000 feet of granite overhead consists of 15 steel buildings, most more than three stories tall, resting on more than 1,300 large steel springs, each weighing about 1,000 pounds. Entrance to the Mountain is through a large tunnel, and the entrance to the buildings is guarded by three interior steel blast doors each weighing

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about 25 tons.

Security is tight. Colorado Springs residents remember when almost anyone who could find their way up the Mountain could be given a tour of the facilities. Not now. Not since 9/11. Inside the now super-secure facility is the:

- Space Control Centre, which detects, tracks, identifies and catalogues all man-made objects orbiting Earth.
- Air Warning Centre, which monitors the air space of Canada and the U.S. for any aircraft or cruise missiles that might present an air threat.
- Missile Warning Centre, which uses a worldwide sensor and communication network to provide warning of missile attacks launched against North America or U.S. and allied forces overseas.
- Operational Intelligence Watch, which gathers intelligence information to assist in analysing, validating and correlating worldwide events.
- Command Centre, the heart of the complex, fuses data from the other centres and passes it on to the leadership of the U.S. and Canada.

The commander of Cheyenne Moun-

tain Operations Centre (CMOC) is American air force Brigadier-General Duane Deal, who is responsible for executing the Norad integrated tactical warning and attack assessment mission, Northern Command's homeland defence mission and the U.S. Strategic Command's space and missile warning support. His second in command is Brig-Gen. Jim Hunter of the Canadian Forces.

But the man calling the shots from this mountain fortress as the tragedy of 9/11 unfolded was Findley, whose 12-hour shift in the Mountain ran into some considerable overtime. "I was in contact by telephone several times during the crisis with Gen. Eberhart," he said, demonstrating the close working relationship between the two countries. At Norad facilities in the U.S., an American is at the helm and a Canadian is deputy commander. It is the opposite in Canada.

One evolution in Norad that military officials are anxiously awaiting is whether Canada will decide to join the proposed U.S. missile defence shield for North America. With or without Canadian involvement, the U.S. plans to begin this fall deploying a series of land-based

interceptor missiles that would shoot down an incoming nuclear or biological warhead from a rogue state such as North Korea.

Although Canadian Forces personnel in Colorado Springs were reluctant to speak on the issue which has been controversial in Canada, Findley said in a later interview with the Ottawa Citizen that it makes sense for Canada to join in the missile defence plan. "It just makes sense to me to be part of missile defence, when you're part of all the other defence functions," he is quoted as saying. "Why wouldn't you want to be part of that last chunk? We already do missile warning."

The two governments have been negotiating for more than a year without a decision. Critics in Canada complain the missile defence shield could lead to deploying weapons in outer space, something the federal government opposes. But U.S. Ambassador to Canada Paul Cellucci has weighed into the argument, saying it's critical Canada join the program. "If Canada decides to take a different route...we'll have missed an opportunity to strengthen Norad."



PHOTO: RAY DICK

CANADA DAY IN THE USA

by Ray Dick

The Mounties are there with their scarlet tunics and Stetson hats, the wail of the bagpipes echoes through the sculpted gardens of a posh resort, a huge cake with a Canadian Maple Leaf takes centre place as some 500 celebrants listen to patriotic speeches and mingle with food and drink in what would seem a typical Canada Day celebration.

The difference at this July 1 event, however, is that it is in Colorado

Spings, Colo., home of Norad, the joint Canada-U.S. aerospace defence command, and the celebrants are part of the large Canadian military and civilian community of roughly 800 who each year go to great lengths to celebrate Canada's birthday with their American neighbours and co-workers. "We think it's one of the biggest Canada Day bashes outside of Canada," said Norad spokesman Major Douglas Martin, decked out in military dress uniform, as

were the other celebrants.

The fact that it's a Canadian party is obvious from the start, although the official invitation is sent to the media from Norad headquarters at Peterson Air Force Base: "The media is invited to the

Lt-Gen. Rick Findley and his wife Carla are flanked by Mounties during Canada Day celebrations in Colorado.

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celebration of Canada's 137th birthday.... Lieutenant-General Rick Findley, deputy commander of Norad, and his wife Carla will host the event. The guest of honour will be Gen. Ralph Eberhart, commander of Norad and of U.S. Northern Command, who will be accompanied by his wife Karen.

"The celebration of Canada Day provides Canadian Forces members working in Colorado Springs an opportunity to share Canadian customs, culture and traditions with their American friends and allies."

Guests begin to file in early for the annual Canada Day party which has become a sort of tradition in this community nestled in high country on the eastern side of the Rocky Mountains. Young Civil Air Patrol members (much like our military cadets) direct guests to the parking facilities and two Mounties guard the grand entrance as guests make their way through a receiving line and into the spacious gardens.

A piper leads the special guests through the garden and into a large open-sided tent (set up in case of rain) where food and drink have been set out and the giant Maple Leaf birthday cake takes centre stage. In the background The United States Air Force Academy Band of the Rockies plays several selections, including O Canada and the musical theme from Hockey Night In Canada.

Findley, after some good-natured ribbing about the Canadian victory in the War of 1812, introduced his Norad boss Eberhart, and told the Canadian and American celebrants that living in Colorado Springs is like living with your neighbour and best friend.

The American four-star general replied that the annual Canada Day celebration in Colorado Springs "is a protected day on our social calendar," and that "the U.S. couldn't ask for a better friend and partner." He especially mentioned the hospitality Canadians showed to stranded American airline passengers in the aftermath of the terrorist attacks of Sept. 11, 2001. "They were taken care of in truly Canadian fashion."

Eberhart then offered a toast to Canada, the cake was cut and the partying continued among the shady nooks and fountains of Penrose House. "Each year we have a theme for these parties," said Martin, focusing on a particular

region in Canada. "This year it's Quebec, and last year it was the Atlantic provinces."

Along with a brochure given to all the guests explaining the historical background of Canada Day and the national anthem, an insert gives a brief history of Quebec from Jacques Cartier's voyage in 1534 to the British capture of Quebec City in 1759 and the arrival of Loyalists from the U.S. in the late 1700s.

The name Quebec itself comes from an Algonquin Indian word meaning "narrow passage," describing where the

St. Lawrence River narrowed at Quebec City, useful information about "la belle province" that even some Canadians were not aware of.

The July 1 party was a suitable warmup for the Americans in the crowd. Three days later they would celebrate their own country's birthday party on July 4, a national fete that would be partially muted this year in this part of the country because of a fireworks ban due to continued drought conditions and the danger of forest fires.



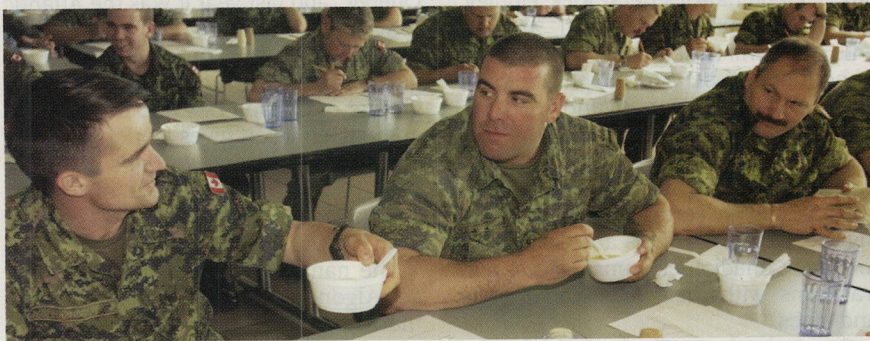
PHOTOS: RAY DICK

From top: Actors re-enact the Wild West at a reconstructed western town near Colorado Springs; Danielle Jaworski and Fidel Matthews enjoy Canada Day celebrations. Both are wives of Canadian servicemen.

The Military MEAL DEAL



BY PAT SULLIVAN



PHOTOS: CANADIAN FORCES

Rations are introduced (left) and sampled (above).

History credits Prussia's Frederick the Great with defining an army as a "group of men who demand daily feeding." Nicole Bélanger-Drapeau knows exactly what he meant.

As project director for the Canadian Forces' combat rations program, the Ottawa-based dietitian oversees the in-the-field nutritional needs of 55,000 military personnel. Not only is she responsible for selecting the one million to 1.5 million Individual Meal Packs (IMPs) the Department of National Defence buys every year, but she has to ensure that military personnel like them. And Canadians' evolving taste buds mean this is not a simple job.

When she started her work in rations 18 years ago, the word vegetarian was all but unknown within the armed forces. Today, with vegetarian restaurants sprouting across Canada and at least five per cent of Canadians declaring themselves vegetarians, the military has had to adjust. In the field, this means that meatless meals are now available for breakfast, lunch and dinner. To meet religious dietary requirements, kosher and halal meals can also be supplied. The situation is the same in the United States, where every case of 12 MRES (meals ready to eat) now contains two vegetarian selections. In both Canada and the U.S., the vegetarian meals do not contain any ingredients derived from animals or animal byproducts.

No one is more aware of the changing attitudes toward nutrition than Chief Petty Officer 2nd Class Gerry Westlake, who is in charge of training new cooks and stewards at Ontario's CFB Borden. He said the results are showing up in military chow lines.

"I just transferred here from a ship, and every meal we served had a vegetarian selection available," said Westlake, who has been feeding sailors and soldiers for 19 years. "Fifteen years ago you didn't

have that—we'd just fry it and serve it."

But if there is growing recognition of the close connection between diet and health, military-based research is at least partially responsible.

In a landmark study published in the *Journal of the American Medical Association* in 1953, three U.S. army surgeons reported the results of autopsies conducted on 300 American soldiers killed in action or accidents during the Korean War. The soldiers had an average age of about 22 years, with the youngest being 18 and the oldest 48.

The results were frightening. "In 77.3 per cent of the hearts, some gross evidence of coronary arteriosclerosis (hardening of the arteries, the major cause of cardiac disease) was found," the authors wrote. Despite the soldiers' relative youth, in three per cent of cases at least one major blood vessel was already suffering from "complete occlusion (blockage)."

Although research into cholesterol and other cardiac risk factors was still in its infancy at the time, the authors pointed out that studies involving Korean men showed relatively few cases of arteriosclerosis. About their own study, they concluded that the results "strongly suggest" that dietary factors played an important role in heart health.

In the 51 years since that study was completed, said Bélanger-Drapeau, a revolution has taken place in the approach to military nutrition. Asked what changes a World War II veteran would see in today's meals, she commented: "Oh my God, they're not even comparable, either in quality or the variety available."

Or in the attention that is paid to nutritional details.

Major Carol Schell, an operations specialist in the armed forces' food services section, said all food provided must meet the standards outlined in the *Canada Food Guide to Healthy Eating*. Among other things, no more than 30 per cent of the energy can be provided as fat, and no more than 10 per cent as saturated fat.

The diet must also provide for reduced sodium content and contain no more caffeine than the equivalent of four cups of regular coffee per day. "We provide the food and individuals make the choices," adds Schell. "If they want to eat fries every day, we don't preach to them."

Westlake said it is much easier to meet healthy-eating requirements today because civilian demand for these cooking products is now so high it is easy for the military to buy them. "Fifteen years ago we'd cook everything in butter because options (like olive oil) weren't widely available. That's not the case today."

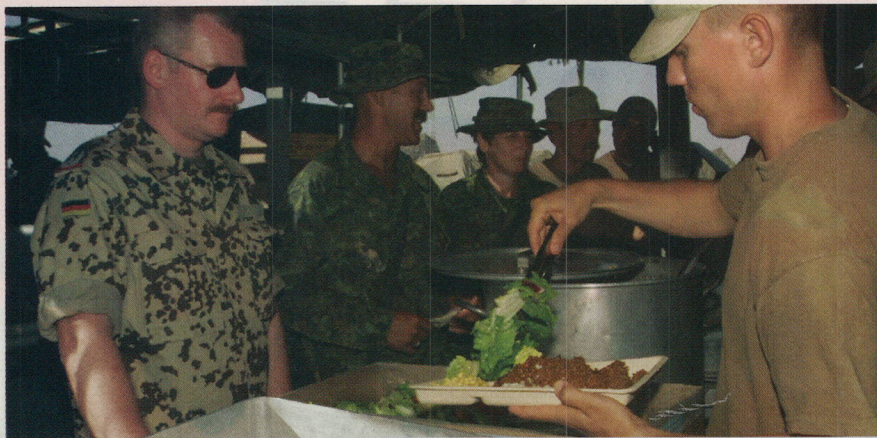
In fact, everything has changed so drastically on the military food front that war veterans would be astounded by everything from the quality to the variety of today's field rations.

In his WW I memoir *Ghosts Have Warm Hands*, Will Bird recalled his arrival in France in 1916 and the culinary delights available at a camp near Le Havre: "At mealtime we waded through the slime to the door of a long dirty hut. Inside, a trio of unwashed characters broke up loaves of bread and tossed a chunk to each man, the size depending on your luck. Another pair poured each man a tin of cold, greasy tea and you received a piece of stringy meat in your mess tin. You ate with your fingers, and everything was dirty. An officer and sergeant entered at the front. At the rear door they paused just long enough to shout: 'Any complaints?' They vanished before anyone could reply."

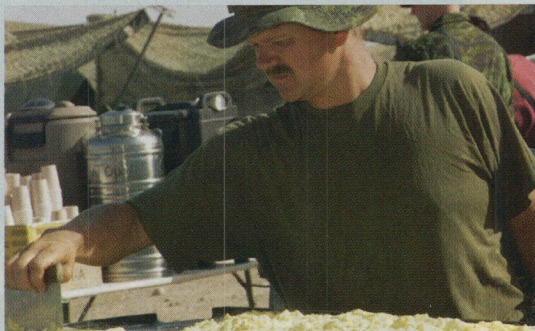
In WW II, George Blackburn's luck wasn't much better. In his book *The Guns of Normandy* he describes one particularly vile breakfast offering. "(It was called) pre-cooked bacon. Cold, it plopped out of the can in a sickly white, cylindrical blob. Heated, it turned into liquid grease, which when poured off left a pitiful residue of red strings representing the lean meat that had streaked the fused rashers."

Nothing provides a better example of

(Continued on page 82)



From top: Soldiers line up for a hot meal in Kandahar, Afghanistan; cook Terry Schuba prepares scrambled eggs in Afghanistan.



PHOTOS: MASTER CORPORAL DANIELLE BERNIER, CANADIAN FORCES

The Military Meal Deal

Continued from page 80

how times have changed than a comparison of a Composite Ration Pack from WW II, which was designed to feed 14 soldiers for a day, and the IMPs today's soldiers receive in the field. In Normandy, the 14 soldiers who got the Type E "compo pack" dined this way:

BREAKFAST

- tea, sausage (two tins), biscuit (one tin) and margarine (one tin)

DINNER (lunch)

- haricot oxtail (12 tins), vegetables (two tins), pudding (three tins, two large, one small)

TEA

- tea, biscuit, margarine, sardines (eight tins)

SUPPER

- cheese (one tin), biscuit

Each ration kit also contained "two tins of sweets," salt, matches, chocolate (one tin, one slab per man), latrine paper and soap (one tablet).

Today's soldiers can select from 18 different IMPs in a given year. The meals, introduced in 1983, each contain about 15 food and five non-food items. For example:

BREAKFAST NO. 4

- ham steak with mustard sauce, sliced pears with syrup, honey-almond oatmeal, grape beverage crystals, bread, peanut butter, hot chocolate mix, Life Savers, gum

LUNCH NO. 6

- pork with herb and wine cream sauce, applesauce, peach beverage crystals, bread, honey, instant mashed potatoes, KitKat Chunky bar, Life Savers

SUPPER NO. 5

- beef stroganoff, sliced peaches, orange beverage crystals, cream of tomato soup, bread, peanut butter, raspberry jam, instant mashed potatoes, chocolate sandwich with vanilla cream, Life Savers.

All meals include condiments such as steak sauce as well as coffee, sugar, whitener, pepper, salt, plastic spoon, moist towelette, matches, paper towel and a toothpick.

The overall cost of the food served today is about \$75 million per year. The IMPs, which range in price from about \$10 to \$11.50 each, cost about \$15 million annually. The other \$60 million is spent buying food for base dining halls or ships' galleys.

The IMPs have a shelf life of three years. In June, with that three-year limit approaching, Canadian soldiers ate 19,000 of the meals over one three-day period in Kabul, Afghanistan, in order to ensure that none became stale-dated.

Each meal provides 1,200 to 1,400 calories, or a total of more than 3,500 a day. The entrée is packed in a thin, flexible "retort pouch" that allows quick heating. And although they are designed to be consumed for only 30 consecutive

days, Canadian soldiers sent to Somalia a decade ago ate them throughout their six-month tour.

Bélanger-Drapeau said new meal choices are added regularly, but only after in-the-field testing by at least 60 soldiers, who then grade the product. To be added to the menu, a score of at least 6.5 out of nine is required.

Not all get a passing grade. For instance, soldiers were underwhelmed when spaghetti with meatballs was tried. "They said the flavour wasn't right," she said. That message was passed along to the manufacturer, who produced a spicier sauce. The meal is now on the menu. Other meals are removed. The infamous ham omelet was dismissed with ignominy in 1992.

Bélanger-Drapeau said more than 60 different entrées are currently on the IMP roster. Units deploying abroad take a two-year allocation—36 different meals—in order to provide greater variety. This means 12 meal choices will be available for breakfast, lunch and dinner.

Although there are ration standardization agreements within NATO, Bélanger-Drapeau said the differing national tastes are readily apparent. Dutch military meals, for instance, often feature pâté. This may appeal to Dutch troops and "taste very nice," she said, "but put yourself in the shoes of the 18-year-old from Saskatoon."

Back at the military's cooking school at CFB Borden, where Gerry Westlake trains about 250 new cooks a year, the instructors pay close attention to culinary developments. "We try to keep up with all the trends," he said. "We also keep in touch with the local colleges like George Brown, which produces a lot of chefs, to find out what they are hearing." Westlake said it takes just 84 days to train a new cook. They return for more advanced training as their careers progress.

Overall, the need for cooks has dropped substantially. Today about 1,100 are stationed across Canada, on ships and overseas. However, there are 30,000 fewer mouths to feed today than in the mid-1980s, when regular-force strength stood at 85,000 personnel. In some cases the military has switched to using civilian contractors to provide meals, even on overseas deployments to Bosnia and Afghanistan.

Schell, who describes herself as a "trouble-shooter" within the food services section, said food-borne health hazards such as bovine spongiform encephalopathy (mad cow disease) and E.coli-type illnesses have created a new level of concern. "We're very cognizant of food safety," she concludes. "If you have 1,000 troops in the field and they all have diarrhea, how much use will they be?"

RETRO RATIONS



PHOTO: NATIONAL ARCHIVES OF CANADA—PA000134

Members of the 8th Infantry Battalion prepare to serve food in May 1916.

Do you have a hankering for the culinary delights enjoyed by Canadian soldiers during World War II? Do you have \$17.50 (U.S.)?

Thanks to some "out-of-shape, thirtysomething guys" in Oregon who share a love of British military history, authentic reproductions of Canadian, British, American, Australian and Russian combat rations from WW II are being sold over the Internet. And business at the "Knacker Squaddies Quartermaster Depot" is surprisingly brisk.

The part-time business (<http://17thdivision.tripod.com>) was launched when one of the founders, who worked for a veterans' organization in Oregon, was queried by a veteran's son about the types of in-flight rations available to B-17 bomber crews during WW II. Because of his connections within the military-memorabilia community, he was able to produce some replicas of the original packaging. Response was so positive that he decided to put some food in the reborn packages, and a thriving business was born. The main market is military re-enactment groups that relive past battles.

"We've shipped to the UK, Canada, Australia, Germany, Switzerland and throughout the U.S.," said a spokesperson, "although it does seem rather ironic that we are shipping repro British rations from Oregon to re-enactor groups in the U.K."

The market is large simply because the re-enactment hobby is now so huge. Thus far, interest in the reproduced rations has been shown by a range of groups whose specialties range from Austrian soldiers in WW I to American troops in the Vietnam War. "I'd hate to hazard a guess at the average number of orders we get per week via EBay and the Web site, but it is certainly enough to keep three of us busy after we finish our day jobs."

The most popular product is a "small-box" version of rations issued to Allied troops prior to D-Day. Available in five different versions (including tinned sardines with cheese-pouch supplement and "meat block" with cheese pouch and pressed-jam supplements), each \$17.50 kit also contains plain and sweet biscuits, two tea blocks ("tea-milk-sugar combo"), one or two blocks of ham or tomato broth soup and several other non-food items, such as "one pack of latrine paper" and a can opener.

All items are new products that have been repackaged in replica labels from WW II. The labelling was produced from photos and digital scans. Any money made from their sale becomes "spending money" that allows the group to buy more memorabilia, particularly from the British army.

Part of the group's Web site is devoted exclusively to Canadian rations from WW II. (The Canadian ration sets were sold out this summer, but more should be available soon.) They include everything from a tin of ham to two packs of sweets. The Web site adds: "Please note: Even though all Canadian boiled sweets are much better than their U.K. counterparts, these are in the original flavour varieties from the 1940s, such as Ice Peppermint and Scotchie Discs, which may appear unusual to the uninitiated palate."

The Canadian ration pack also contains a pack of "latrine tissue that is great for sanding or cleaning the gas relief on the Bren."

There is one sign that times have changed, however—the replica ration packs do not contain cigarettes. In the history section dealing with Canadian rations, the authors note that WW II Canadian 24-hour and 48-hour ration packs came with either a four-cigarette slide pack or 20-cigarette tin. ■