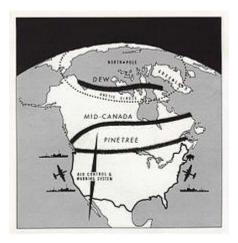
CIVIL DEFENCE SIRENS IN MEDICINE HAT

Following the Second World War a situation called the Cold War arose, wherein the USSR became an enemy of the western countries, primarily the USA and Canada, even though Russia had apparently been an ally during the war. The result was the establishment of an organization of the Federal Government – Civil Defence Canada (sometimes referred to as EMO or Emergency Measures Organization).

In 1954 a joint operation of the US and Canadian governments established three chains of radar stations across Canada to provide early warning of a nuclear attack from Russia. The most well know of these was the DEW line, situated above the Arctic Circle and extending from Greenland to Alaska.



The situation became critical following the failed attempt in 1961 of the United States invasion of Cuba, a new Soviet ally. The invasion was known as the "Cuban Missile Crisis". There was genuine fear across north America that the possibility of nuclear annihilation existed.

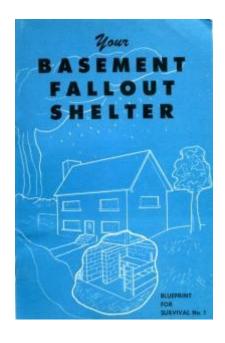
On August 6, 1945, the United States had used a massive, atomic weapon against Hiroshima, Japan. This atomic bomb, the equivalent of 20,000 tons of TNT, flattened the city, killing tens of thousands of civilians. Would the USSR do the same to cities in the USA or Canada?



The Federal Government set about in 1961 to establish a series of Civil Defence Sirens in communities across Canada via the various provincial governments. In Alberta the tasking agency was a called Alberta Emergency Measures Organization. Seven installations were scheduled for Medicine Hat. Construction of the sirens in Medicine Hat began in 1962.

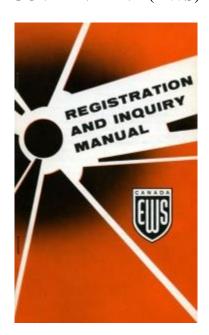
Once in place they were implemented as part of the cross-Canada network of similar sirens in all communities. If there had been missiles launched by the Soviets, then the radar stations of the DEW line would have detected them, the Prime Minister's office alerted, and then, only on the authority of the Prime Minister, would the Army call every telephone company's office across the country to alert the local authorities to activate the sirens.

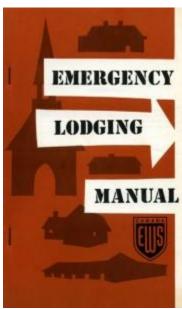
Coincidentally, Civil Defence Canada provided booklets to all Canadians describing the dangers of radiation of H-bomb blasts, building bomb proof shelters, and surviving such a holocaust.

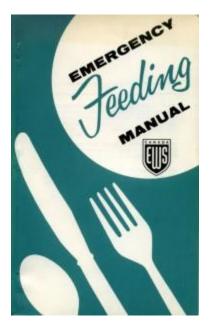


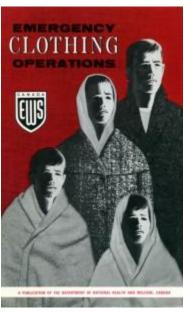
THIS MANUAL CAME COMPLETE WITH A SET OF BLUEPRINTS.

THE MANUALS SHOWN BELOW WERE PUBLISHED BY THE EMERGENCY WELFARE SERVICES DEPARTMENT OF THE FEDERAL GOVERNMENT (EWS)









THE FOLLOWING PAGE APPEARED NEAR THE FRONT IN ALBERTA GOVERNMENT TELEPHONE BOOKS IN THE MID 1960s

MEANING OF THE WARNINGS	EMERGENCY ARRANGEMENTS
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In the early1970s, the threat of a nuclear attack began to decline, and with the development of new technologies – high-speed missiles and the like – the usefulness of a warning system diminished. Practical warning time went from a few hours in the 1950s to less than 15 minutes in the missile age. The Federal money began to dry up and it appears the last year of operation of the program was 1964. Once the program was discontinued, neither the Federal or Provincial governments seemed to want to lay claim on any existing sirens, so many municipalities, including Medicine Hat, have laid claim (quietly and unofficially) to any remaining sirens and their supporting structures. As of 2015, there were three remaining intact siren structures in Medicine Hat as shown below.



THIS POLE WITH ITS SIREN ON TOP IS LOCATED JUST EAST OF DIVISION AVENUE BETWEEN THIRD AND FOURTH STREET S.E. THE PHOTO WAS TAKEN FROM ACROSS DIVISION AVENUE, LOOKING EAST. IT IS THE ONLY SIREN THAT WAS MOUNTED ON A STEEL POLE.



THIS IS A CLOSEUP VIEW OF THE SIREN. NOTE THE WORK PLATFORM CONTAINING A CONTROL PANEL FOR TESTING AND MAINTENANCE PURPOSES.



THE SIREN SHOWN ABOVE WAS LOCATED IN NE CRESCENT HEIGHTS IN THE LANE WAY BEHIND WEBSTER NIBLOCK SCHOOL. IT WAS REMOVED IN 2016; INTENDED USE TO BE DECIDED.



THE SIREN ABOVE WAS LOCATED ON THE NORTH SIDE OF GERSHAW DRIVE S.W., OPPOSITE THE ENTRANCE TO THE MUNICIPAL AIRPORT. IT WAS REMOVED IN 2016; INTENDED USE TO BE DECIDED.

The location for each siren was chosen for the best acoustical coverage for that area of the City, with overlapping coverage from other nearby sirens. Although there apparently were four other sirens installed in the City, only one other was to be mounted on a metal pole. With the exception of the siren that was to be installed on the roof of the (old) City Hall, the others were to be mounted on wooden poles. There is no evidence that all seven sirens were installed in Medicine Hat and no drawing showing intended locations is available.

The actual sirens, mounted on top of the poles were provided by the Department of National Defence through the Army, but the City was required to provide suitable locations on public land. The City also had to provide the poles, the platforms at the top of the poles, the electrical wiring and power, along with a means of remotely controlling the activation of the sirens when required. A fourth siren, no longer in existence, was located at the west end of Crescent Heights in the laneway behind 94C 8th Street NW, and a fifth siren, also no longer in existence, was located a few metres southeast of what is now the intersection of Southview Drive and Cameron Road SE.

It is not known whether a siren was mounted on City Hall, although one was apparently scheduled for installation. The separate curfew siren located there was in use long before 1962 to effect a 10 pm curfew and is believe to be still in use after the decommissioning of the civil defence sirens. It may have also been used in conjunction with the Civil Defence Sirens.

Although the DEW line officially ceased operation in 1993, the last of the total decommissioning and cleanup was completed in 2013 at the last remaining site.

As a matter of related interest, in the early 1960's the long-standing Federal Building (Post Office) on the corner of Second Street and Sixth Avenue SE was torn down and replaced by a newer one at the corner of Second Street and Fourth Avenue SE. In a sub-basement a fully equipped emergency hospital was established during its construction. The purpose was to provide a hospital that was essentially bomb-proof for the intake of victims of atomic bomb explosions. The Esplanade now sits over the same ground and unfortunately no photos exist to show what that hospital looked like, but knowledge of its presence gives credence to the cold-war concerns of the time.

THE SIREN AT THE DIVISION AVENUE LOCATION

This siren was manufactured by CLM Industries of Scarboro, Ontario. The energy required to drive the rotors was typically a 5 HP 3-phase motor.



EXAMPLE OF NAMEPLATE

This particular siren is described as a dual tone type. Sound is generated by the motor driving a shaft with two rotors that create the sounds. The two rotors have different number of blades to create two different frequencies of sound to distinguish the air raid sirens from the single tone sirens as used by emergency vehicles. The pitches of the two tones are usually in a 5:6 frequency ratio (an untempered minor third). The sound intensity on such sirens typically was in the order of 130 db as measured at 100 feet, which is above the pain threshold and essentially the same as the sound of a jet engine at the same distance. It was designed to emulate the air raid sirens used in Great Britain during WWII. Thus, it also gave the same wailing sound that was so familiar to British residents during the war.

TESTING THE SIRENS

Prior to Telus, the telephone company in Alberta was called Alberta Government Telephones (AGT).

On the third floor of the AGT building in Medicine Hat there was an electrical panel called a "board." There were switches on the board to activate each of the installed sirens. Near the board at was a red telephone and if and when it rang, it was presumed the caller was instituting an emergency situation. At the time, the board also had direct emergency telephone connections to various other sites in the city – connections to all the police, fire department, radio stations, CHAT television, and the superintendent at the CPR station, so that conversations could be routed very quickly in times of emergencies – not just in the case of an air raid.

AGT employees were tasked with periodic testing of the sirens. Two employees were required to perform this task. One employee was sitting at the board in the AGT building and the other was required to climb the pole at each siren site for testing. As radio communications was not available, the testing was done on a predetermined time basis.

In 2013 a retired AGT/Telus employee who had worked on the sirens in Medicine Hat was interviewed. He was one of several employees tasked with being the man on site at a siren for the purpose of testing the siren.

Having climbed the pole, he would open the control box located on the platform and would throw a switch to disable the power connection to the siren and then watch for a status light to come on in the control box to light up instead. The power to the system was activated at a pre-determined time by the AGT employee back in the AGT building to indicate that power was actually getting to

the top of the pole. When the light was extinguish the man on the pole could safely close the switch to the siren to put it in an active mode. Then he would climb down the pole and wait at a safe distance so as to not get an enormous blast of air and siren sound in his ears when the siren was activated on test. There was no radio communications between AGT and the man on the pole, so timing was very important.

Currently a similar board exists on the third floor of the Telus building for emergency requirements, without any connections to the old siren sites.

THESE REMAINING SIRENS ARE A SOLEMN REMINDER OF THE TENSION THAT EXISTED BETWEEN THE WEST AND THE FORMER SOVIET UNION FROM POST WWII UNTIL THE LATE 1980s. THE FALL OF THE BERLIN WALL AT THAT TIME SIGNALED THE END OF THE COLD WAR ERA.