

Time Capsule

June 2021

The Forgotten AIRFORCE of the Pine Tree Line

Scattered across the vast landscape of Canada and for the most part hidden away out of sight and covered by overgrowth there exists the remnants of a defence system once known as the Pine Tree Line. During the Cold War 1945-1991, the Royal Canadian Air Force (RCAF) maintained thirty-three radar stations manned by highly trained RCAF personnel and supporting staff. Their mission was to monitor, secure and respond to potential threats from the Soviet Union into North American airspace and in particular that of Canada. They were Canada's first line of defence. Initially this led to the establishment of an air defence organization, NORAD, North American Air Defence Command which was formed in 1957. However, air defence had its beginning with an agreement between Canada and the United States during the Second World War.

It was not until 1951 that the RCAF/USAF radar line was agreed upon. The Pine Tree Radar line was the first line of the overall North American radar system that was designed as a fighting line (note fighting line). Suffice to say its significance cannot be understated. Thirty-three radar sites were to be built by 1954 in Canada and co-manned by Canadian and American air force personnel.

One of the first was Lac St Denis north of Montreal which was built in 1949. The US government financed 22 stations and Canada the remaining eleven. The USAF manned almost all of the stations west of the Ontario/Quebec border and more than half the stations in the

Maritimes. Eventually the USAF personnel left and RCAF personnel replaced them.

The original concept for the Pine Tree Line was for the defence of the industrial heartland and that is why most of the stations were built in the east. The early stations included Mont Apica, Lac St Denis, Foymount, Edgar, Chatham, Halifax, Armstrong, Sioux Lookout, Comox, Baldy Hughes, to name a few.

In the mid 1950's the change from defence of the heartland to the defence of strategic air command (SAC) bases, a second phase of Pine Tree Line construction was completed between 1957-1964 filling the gaps in the prairie provinces, northern Ontario, and Quebec, these included such stations as Moosonee, Dana, Yorkton, and Chibougamau. In the early years stations were manned by 300 to 400 personnel of which one third were civilians. By the 1960's, technology had driven this number down to between 120 to 200.

The Stations consisted of two parts, the Operation site and the domestic site. The ops site had a main structure with an elevated medium range radar. Wind damage led to the familiar dome covering. The operation site was manned 24 and 7. The domestic site consisted of two storey barrack structures, mobile trailers, and married quarters. All stations were self contained communities with a power plant, administration buildings, hospital, churches, recreation centre, messes, theatres, fire station, transport and maintenance and water supply with sewage treatment facilities. Some had a school, while others bussed dependent children to local schools. Many stations also featured pools, golf courses, and curling rinks.

As many stations were semi-isolated with an abundance of forest and lakes, activities such as camping, fishing and hunting were very popular, and there were many all-season activities. These stations were truly an

ideal family environment and many personnel who served on them, generally for a two-year posting with their shared experiences and became life-long friends.

By the early sixties, manual plotting and controlling had disappeared and was replaced by a computer-based system called the Semi-automated ground environment system (SAGE). Again by the early 70's Pine Tree stations were utilizing solid state computers and new search radar technology with increased range. As a result redundancies were eliminated and a number of stations were closed. By 1982 the SAGE system was replaced with the Regional Operation Control Centre (ROCC). This change coincided with NORAD's reorganization and thus ROCC east and west were both located in North Bay.

The final stroke in the decline and end of the Pine Tree Line came with a change in the defence concept of North America. The emphasis was placed on a perimeter defence and eliminating the coverage of the interior. During 1987-1988 all but some coastal stations were closed. Thus ended a remarkable period of service for the Pine Tree Line. The Stations had been mission successful and had mitigated the Soviet threat to North America.

In the end, the stations were abandoned by the military and returned to municipalities, many structures were left intact and were utilized by the local community. Some however are derelict and graffiti can be found on what remains.

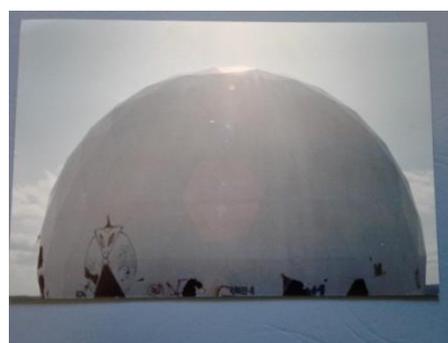
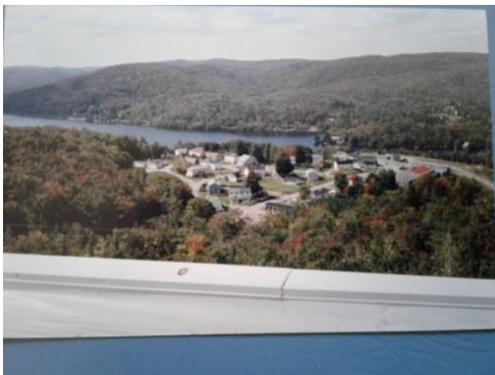
Thousands of RCAF personnel and support staff served on these stations, secured our freedom during a period of intense friction, often in remote places with limited services. Unlike their NATO or peacekeeper counterparts who have memorials and medals acknowledging their service, the personnel of the Pine Tree Line are the forgotten Air Force. No plaque, no medal, no acknowledgement to

the men and women who served on the "fighting line". The Cuban Missile Crisis, the Bay of Pigs and numerous alerts are but footnotes to their story.

My father, Corporal Gordon Bruce James Rice served as a Clerk Intelligence GP 3Y at Lac St Denis in the Operations complex from 1960 to 1962 and was a participant on the fighting line during the Cuban Missile Crisis.

A member of our wing, Raywin Raaflaub also served at Lac St Denis, as a RCAF ME during the late fifties and participated in many alerts, he has many great memories.

Both were members of the forgotten AIRFORCE.



The pictures show Lac St Denis today, image of the domestic site, the Operation complex and dome.



Corporal Gordon Bruce James Rice on his departure from Lac St Denis 1962 with his award of Airman of the Year in hand, and closeup of the award.



LAC Raywin Raaflaub, 2nd from right back row, ME course.



Ink drawing of Lac St Denis with station crest.