

WHAT EVER HAPPENED TO VE8RCS?

By Jerry Proc VE3FAB

[This is a condensed version of the story about Canadian Forces Station Alert which is derived from one of the author's web documents].

For nearly four decades, amateur station VE8RCS and its two predecessors operated from Canadian Forces Station Alert, which is located at Alert, Nunavut. Alert is the most northern permanently inhabited settlement in the world and is situated on the northeastern tip of Ellesmere Island in the Canadian Arctic, approximately 817 km from the geographic North Pole at coordinates 82°28' N, 62°30' W. Many an operator reading this story might have worked this famous station during its active days. Since the station is no longer on the air, the intent of this article is to trace the station's history from its beginnings until its demise in the 1990's.

Amateur radio played a key role in helping to maintain high morale among the station's personnel - both for its operators and those only wishing to pass messages or using a phone patch to keep in touch with home and loved ones. It was especially important in the days when mail arrived every 6 weeks! The "ham rig" was always referred to as the "backup" communications system, hence the justification for its existence.

VE8AT - THE BEGINNING (1957 to 1958)

Amateur radio saw its beginnings at Alert Wireless Station in 1957, when Earle Smith (now deceased) was authorized by the Department of Transport (DOT), the Canadian licensing authority to use his own call sign VE8AT for the very first station. This was the same call sign which he used in Whitehorse, Yukon when he got his license in 1954. Initially he encountered difficulty in securing permission to bring his own equipment to Alert but this was quickly solved. When the Air Officer Commanding, Air Transport Command dropped in for a visit, Earle and a group of other personnel had a heart-to heart talk with the Commanding Officer. Permission to operate an amateur radio station was granted before the CO left the base.

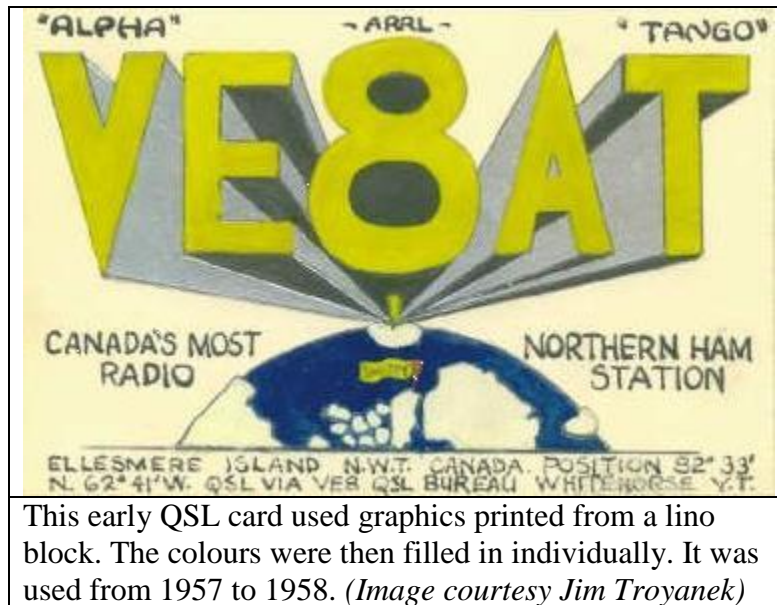
Marcel VE8NS, one of the weather station observers, loaned Earle a Johnston Viking II Ranger transmitter. Earle supplied his own Vibroplex key which he acquired from a USAF communicator in Goose Bay, Labrador in 1954. For receiving, an RCA AR-88 was used. During Alert's traffic blackouts caused by ionospheric the military BC-610 HF transmitter was authorized for amateur radio use.

Besides this station, Earle also had the use of a Hammarlund SP-600 receiver plus the AN/FRT-501 transmitter. The FRT-501 was a backup transmitter to the HF link but it became dedicated to amateur radio operation at least for a short while. Slight modifications were made to '501 transmitter so it would operate with a VFO. Double sideband (DSB) capability was added in addition to the normal CW/AM modes. All the modifications were removed prior to Earle's departure from Alert.

For antennas, the station used a homebrew two element ZL-Special and an

insulated Beverage-wire laid on the ground. It was about 1-2 miles long and worked great so long as the wind wasn't blowing snow across it.

There were also other antennas which could be selected at anytime. When Earle departed in 1958, so did his call sign thus leaving Alert Wireless without an amateur station until the Royal Canadian Corps of Signals (RCCS) activated VE8TU. Earle's call sign today is VE6NM. Call sign VE8AT now belongs to an International Amateur Radio Union (IARU) beacon transmitter located at Eureka, Ellesmere Island.



VE8TU ARRIVES (1960 to mid-1964)

Next, call sign VE8TU came into use around 1960. Ron Hutchinson, VE3NG provides a bit of history for that period. "My involvement with Alert began in 1963 when I received a posting as a civilian radio operator at the station as an employee of the Department of National Defence.

Alert Wireless Station (AWS) was re-subordinated from the Royal Canadian Air Force to the Royal Canadian Corps of Signals in 1958. About that time, the call sign VE8TU was issued and it was used until mid-1964, when it was changed to VE8RCS, to more accurately identify the station. The call sign suffix 'RCS', a contraction of Royal Canadian Signals, was already in use at that time at the Corps HQ in Kingston, Ontario (VE3RCS) and at one or two other RCCS stations, so the change to VE8RCS was a logical progression.

By that time, the presence of the Canadian military in Alert was a matter of public record and the mission of Alert Wireless Station (AWS) was stated to be high Arctic communications research. The association of AWS with the amateur radio call sign, the Signal Corps and the Canadian military was no longer considered to be a security risk by those in charge in Ottawa.

The existence of the amateur station at Alert occasionally continued to come into question from a security point of view by various military command elements. There was concern that operational details of the station might be accidentally compromised over the air. It was justified to higher authority on the grounds that amateur radio provided a much needed means for station personnel to communicate, via phone patches, with their families in the south. Without it, except for urgent medical or extremely compassionate family matters, there was no contact with family members other than by mail. In the case of the former, such contact was only conducted through official military communication channels on the authority of the respective commanding officers. There were no public communication facilities.

It must be remembered that, from a security point of view, AWS was an extremely sensitive military installation. Even reference to its generic mission, and the term SIGINT (Signals Intelligence), was classified as TOP SECRET at that time. The 'no ham station' views did not prevail, however, authority was granted for the station to continue operating, but with a very strict list of restrictions, such as:

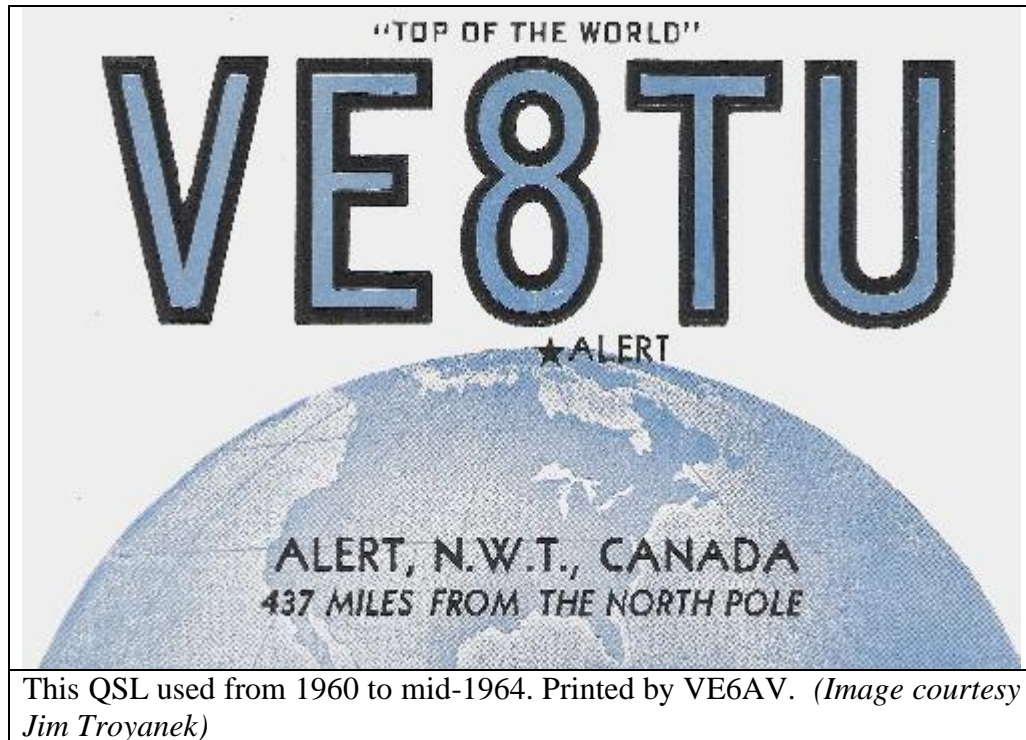
- The primary purpose will be to provide phone patches for station personnel.
- Casual on-air activities such as rag chewing, DX'ing and contesting will be limited, but not prohibited, and will not take priority over phone patching for station personnel.
- Military ranks and surnames will not be used on the air.
- There will be no contact with Amateur Stations in the Soviet Union or East Bloc countries.
- Details of all station facilities, logistics, personnel rotation and ranks, the weather, or any other subject related to specific station capabilities or activities will not be discussed on the air.

Another favourite activity in the ham shack was the regular contacts with stations of the JAWS (Joint Arctic Weather Station) network. We talked regularly with Eureka, Isachsen, Mould Bay, Pond Inlet, Cambridge Bay, Resolute Bay, Grise Fiord and a few others on 75 meters during the winter months and sporadically during the summer 24 hour daylight period. The High Arctic Net, as we came to call it, had a sked every night at 7 PM on 3750 kHz and we would rag chew for hours sometimes.

When I arrived in Alert in October 1963 the equipment in use at VE8TU was an old BC-610 transmitter and a Hammarlund SP-600 receiver and an outboard frequency meter. Later that year or early in 1964 we received a Technical Material Corp (TMC) Model SBT-1K transmitter and a Racal RA-17 receiver. The SP-600 remained in the station but a Frequency Shift Converter (FSC) and Model 28 Teletype were added. The latter was installed with the intent of being the backup emergency communications for Alert. That apparently justified the expenditure for the TMC SBT-1K transmitter for the ham shack.

When I left Alert in the Spring of 1965, the TMC transmitter and the Racal RA-17 receiver were still the main components in the station. I understand that later that year, or sometime in 1966, all of that was replaced by a Collins KWM-2 transceiver, 30L1 amplifier and matching station console

with phone patch. That certainly would have made it 'state of the art', as that Collins configuration at that time would be considered any ham's dream station".



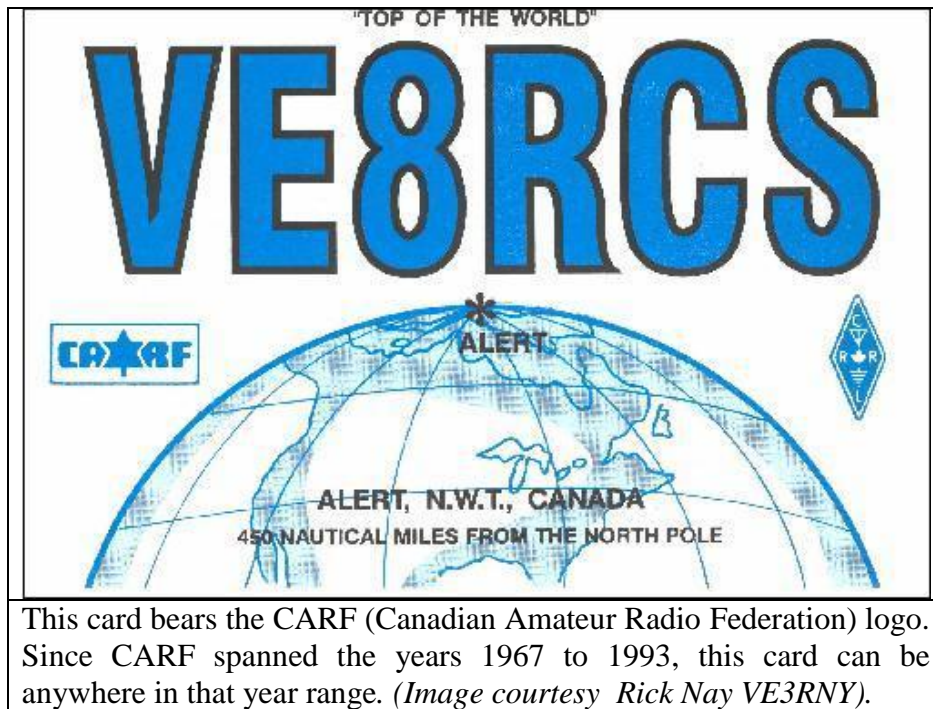
VE8RCS ERA (mid-1964 to 1997)

This call sign change occurred in summer of 1964. Jim Troyanek served in Alert in 1964 and confirms operations under that call sign. It was registered to the Polar Amateur Radio Club, Wireless Station Alert , via RCAF Lancaster Park, Alberta.

VE8RCS, being in the most northerly inhabited place in the world, made it the most sought after station in the world. In second place was KC4AAA, the US Forces Station at Scott Base, Antarctica followed the King of Jordan (JY1A). His wife Queen Noor was JY1B and his son, was JY1C.

Doug Hyslop, VE9IZ, operated from Alert in April 1966 and recalls some of those memories. "With the opening of Alert's low power, broadcast band AM radio station, I got involved with broadcasting and together with a group of fellows, also formed the Alert Amateur Radio Club under VE8RCS. As a result of my enthusiasm, I was elected President of the club until I was posted to CFS Leitrim. In 1967, after becoming President, I had the privilege of making the longest contact on AM from Alert to "Little America" at the South Pole. At that time, that contact was written up in QST and other ham radio magazines. When it was my turn to start a station, I discovered that somewhere in the 1963-64 period, the AN/FRT-501 transmitter previously used in amateur service had major problems and became unserviceable. In those days we had to fight for everything. Ottawa saw no administrative justification for sending any amateur radio equipment to Alert because there was no stability or club who could look after the equipment.

A radio mechanic from Royal Canadian Sigs and myself modified the defective AN/FRT-501 transmitter to make an AM (DSB) mode station capable of transmitting on 20 meters around 14,150 kHz. We used a WWII era BC-221 frequency meter to check the transmitting frequency. The rest of the gear consisted of a refurbished RACAL receiver hooked up to a 3-element beam, fixed in the southerly direction because the rotor was defective. The transmitter produced a delightful amount of power in the range of 50 to 150 watts. Since there was absolutely no EMI in Alert, nor interference from other transmitters, it made for an incredibly quiet receiving environment, something which I have never experienced any time since. For many hours, I would sit in the shack just listening to different places from all over the world. After rebuilding the '501 and forming an amateur radio club, our ability to organize and deliver the goods clearly demonstrated that there was a new 'crowd' in Alert who could make things happen. Now, when we requested something new, Ottawa listened. After instilling further confidence, we requested a better transceiver. It was requisitioned as a morale booster and another backup rig for the antiquated system for sending messages back to HQ. They must have paid attention to our request and after many months of deliberation we were sent a Collins "S" line station just as I finished my tour of duty in Alert and was flying out of there. To this day, I have not had the opportunity to use this fine amateur radio gear.



I cannot overemphasize the importance of the phone patch for the morale of the personnel. It was not lost on the Commanding Officer (Lt Cdr. Stroud), who by the way, liked his phone patches too. To give you some idea, two weeks before Christmas and until the middle of January, the CO re-scheduled me from my regular duties and I was given the task of operating VE8RCS twelve hours on, and 12 hours off in order to accommodate the high volume of phone patch traffic. After I left Alert, I had the intention of getting my permanent license, however, my family and expenses made me put it aside. I was not aware that I could have renewed my temporary licence".

Operating Alert's amateur station was not without its own form of stress. For security reasons, no surnames were ever permitted on the threat of disciplinary action. The operator was not allowed to make reference to their home station, their rank, their home phone number or any other piece of personal information. It was forbidden to let it be known that you were at a military station, never mind mentioning that it was a radio station or what its function was. The general rule at all naval stations in Canada's Supplementary Radio System (SUPRAD) stated that no amateur radio communication was permitted with Iron Curtain countries. The list of forbidden countries was promulgated in Station Standing Orders. For those following the posted orders at Alert, they felt the rules to be especially draconian. (As if the Russians didn't know what was going on in Alert).

OPERATIONS AT VE8ML

The story of amateur radio operation from Alert would not be complete without including VE8ML, the station that was operated by The Meteorological Service of Canada.

In 1950, a weather station of the JAWS system was established at Alert along with an aeroradio station. Amateur radio also saw its beginnings at the Met Station. It was established under call sign VE8ML and operated independently of the RCCS station. In fact, it was ultimately necessary to coordinate ham radio operations so the Met station would not interfere with VE8RCS and vice versa.

Ron Hutchinson provides some background info. "All the amateur stations in the high Arctic JAWS weather station network were assigned amateur radio call signs under a VE8Mx series by the Department of Transport, the regulatory authority for communications in Canada at that time. I remember VE8MB was Mould Bay. Some of those stations were really isolated and were only comprised of 6 or 8 non-Inuit personnel so they were often anxious to talk to anyone they could". Today, VE8ML is gone just like VE8RCS. Based on call book listings, it is concluded that VE8ML closed its doors somewhere around 1985 or 1986.

THE BEGINNING OF THE END

When the satellite/microwave link from Alert to Eureka (Ellesmere Island) was installed in the early 1980's, it brought telephone service to Alert for the very first time. As a result, there was less need for phone patches but a normal operating schedule was still maintained by VE8RCS. Being able to phone home from Alert became one of the "job benefits".

Jim Troyanek explains. "We never paid to call home - it was one of the job benefits. At first, and for several years afterwards, it was a strictly controlled service for the personnel of the base. I believe each person was allowed one 15-20 minute call per week. I remember the scheduling list where one would write their name in a "call time" slot. If I recall, there were two phones and they were constantly in use for most of a 24-hour period particularly in the summer when the supply replenishment crews were there. There was always someone behind you waiting to use the phone. That system was still in use in 1986 when I was there, but by 1989 the restrictions had pretty much been lifted to allow personnel as many calls as they liked provided it was kept within reason. Call durations were monitored but as far as I know, there was no abuse of the system".

The installation of remote control equipment and capability in the 1997 time frame, resulted in the downsizing of the operations staff. Now, personnel stationed at CFS Leitrim, just south of Ottawa, could do all the monitoring functions formerly performed at Alert. This new capability also required that the satellite communications link from Alert to CFS Leitrim (just south of Ottawa) be upgraded from a T1 speed (1.544 Mbps) to T2 (6.2 Mbps). The additional bandwidth now permitted the remaining maintenance personnel to use such appliances as a web camera to communicate with home thus rendering phone patches and amateur radio obsolete.

THE END

This development sealed the fate of VE8RCS. Mike Lonoke (call sign HA/W0YR), in Budapest, Hungary announced the final date on 20 meter SSB. "In a QSO with VE8RCS on 12 May at 0848Z on 20 meter SSB, operator Steve at VE8RCS told me that amateur radio station VE8RCS on Ellesmere Island would be closing down on May 15th, 1997. Steve, an unlicensed ham but authorized station operator who is studying for his own call, said the final QSO's from the world's farthest northerly station would terminate around 1000Z on May 15 after 30 years of operation under call sign VE8RCS. Steve said the conversion to full automation had been contemplated for some time but the project moved along much faster than anyone had thought. All we have left now is this 100-watt transceiver, the microphone and the 5 element Yagi. Everything else has been boxed up." Now the question "What Ever Happened to VE8RCS?" has been answered.

VE8RCS also had a web page but that too is long gone. Due to the popularity of the site, all that's left now is trail of broken links. It is always sad when any era comes to an end, but we must move forward and adapt as modern communication technology changes our way of life.

I would like to extend my appreciation to all the individuals who contributed to this story and are listed by name throughout the article .For those with Internet access, the entire article on CFS Alert can be viewed at: <http://jproc.ca/rrp/alert.html>

Regards,
Jerry Proc VE3FAB
Toronto, Ontario
e-mail: jerry.proc@sympatico.ca
<http://jproc.ca>