

by Mike Dörner, Jr.

In 1973-74 I worked as newsman and writer for KNOM 780 Nome, Alaska, and was able to gather information on a number of western Alaskan radio stations. The following is offered not only to DXers but also to those who are interested in radio broadcasting as such.

A few words about Alaska are in order. Everyone knows that it is the largest state in the Union; I knew as much, but was still not prepared for the sheer immensity of this state. I did not know, for example, that it is twelve hundred air miles from Seattle to Anchorage, and almost the same distance from there to Nome. One has to see this immense, brooding land from the air to appreciate it. One flies for hundreds of miles and sees no sign at all of human existence: no roads, no cuts in the mountains, no glint of sunlight off a car or house window, no fences, no domesticated animals, no power lines. This has to have a dramatic influence on any communications in the state.

Another item to consider is that, outside of Anchorage and Fairbanks, hardly any other town has an economy sufficient to support a commercial radio station. Juneau is another; it is the present state capital but has only some 6,000 people. Those of you who have long been DXing the medium wave band are familiar with small-town Alaskan stations: on about dawn till late morning or early afternoon, back on the air in late afternoon until a few hours after sundown. In the lower 48, small towns of comparable size do support one, and sometimes two, commercial radio stations, but it must be remembered that these cater to county populations of several tens of thousands and, in any case, are actually relying on the surrounding agricultural, mining, or tourist populations to keep on the air. In Alaska there rarely are such outlying populations; Nome, for example, has no permanent residents living more than two miles outside the city limits. The nearest living soul is 25 miles away—actually 20 souls.

And this is why Alaska has so few radio stations. The 1977 WTH lists 26 stations, and I think that one or two have since been licensed, including a station at Willow, near the site of the new state capital under construction, north of Anchorage. WTH lists four non-commercial stations. Actually there are at least five. The correct listing should read: KYUK 580 Bethel, KDLG 670 Dillingham, KBRW 680 Barrow—on the north shore and probably the Scandinavian's delight, KOTZ 720 Kotzebue, and KNOM 780 Nome. KNOM actually has a commercial license, but operates non-commercially. In addition, there are two stations operated under religious auspices, KICY 850 Nome, owned by the Evangelical Lutheran Church and partly commercial; and KJNP 1170 North Pole, just outside of Fairbanks. Additionally there are a number of non-commercial FM, some only ten watts, and all financed by the Alaskan Public Broadcasting Authority, at least in the initial stages.

Some of the MW listed above are also APBA fina need—KYUK, KOTZ, and probably KDLG and KBRW. KYUK has an educational TV affiliate, the first in western Alaska. The Eskimo were fascinated to no end, and KYUK recently got permission to broadcast commercial TV program videotapes, complete with commercials, since it is the only TV in western Alaska, outside of CATV in Nome and Kotzebue. Currently the FCC is authorizing low-power translators throughout the rural areas of the state to originate their own programming, basically videotapes of educational KUAC-TV Fairbanks, KAXM Anchorage, and KYUK-TV and from satellites. Most of these stations belong to Eskimo, Aleut or Indian villages and are far, far away from any "Grade Z" TV signal.

To return to MW: Nome's oldest station is KICY 850, or K-ICY. It is heavily evangelistic, with Gospel programming of fundamentalist persuasion produced either in the lower 48, or at the studios in western Nome. A number of Eskimo-language programs are broadcast, for the Protestant missionaries in western Alaska have taken the trouble to learn the many dialects, and are translating the Bible into their languages. KICY is affiliated with ABC-Information, but when I was there it was carrying live network news once in the morning and once in the evening because of the great expense of telephone circuits. At the time all teletype and telephone links to

western Alaska were carried by the Air Force's "White Alice" system, the pioneer tropospheric scatter communication system built to serve the farflung radar and defense installations. KICY has an aggressive local news department. The final hour of the day, 2300 local time, is dedicated to a broadcast to Russian listeners in their own language. The program comes taped.

If I recall correctly, KICY was built about 1962, and I was told by the KNOM manager that the Russians intervened with the State Department when they heard of its construction, for they feared the station would be a propaganda outlet. Assured that it was for Alaskan native listeners, they relented. I asked Dave DeVries, program director, if they had ever received a letter or report from Russia, and he said that they had indeed, once. A listener near Provideniya had written a letter in which he said that this was his third effort to write, since the other two had been returned by the Russian Post Office. The letter was postmarked a number of Russian cities, last of all Moscow, and was almost a year old when it finally arrived. KICY answered, but no one knows if the letter were ever delivered.

KICY has a large map in its main studio with colored pins marking areas of the world which have reported reception. Countries include Australia, Japan, Sweden, Canada, and the U.S. I believe that there was one Latin report. Its 5 kw transmitter delivers a signal into a single-stick antenna of rather short height east of Nome along the Beach Road.

KNOM was built about 1971 by Jesuit priest Rev. James Poole to counter the Protestant signal of KICY. At the time, except for a dozen or so generally low-power AFRTS relays in western Alaska, KICY was the only station to be heard and, as anyone who has ever lived in the Alaskan wilds during winter-time can testify, it gets powerfully lonely with little entertainment. The bishop of Fairbanks diocese authorized the station if Father Poole could raise the funds, which he did by appealing to a wide range of people, including Hollywood types.

KNOM runs on WBBM's clear 780, with 10 kw day and 5 kw night. The equipment is exclusively Collins, with the exception of production room Scullies and a McMartin production board. Asked why he went so expensive a route, he replied, "When you're 2400 miles from Seattle, you can't afford to keep phoning for parts and then waiting two or three days and paying all that air freight." The Collins equipment is extremely reliable, though the transmitter, remote-controlled from the station on Third Avenue, has to be prodded on manually when the mercury dips below zero. Once the transmitter goes on, it heats its own building.

The interesting thing about KNOM is its antenna—a folded unipole on about a 140 ft. tower. The unipole was carefully chosen by consulting engineers as offering the best ground wave signal, since Father Poole was interested in serving the Eskimo, Aleuts and Indians with a good consistent signal, and was not interested in skip on skywave. It should be noted that, at that height in the latitudes, the northern lights plays havoc with skywave signals. Many a night we dialed the M band futilely in search of distant signals. This is the major reason why KNOM is seldom heard outside Alaska, though it was heard consistently in the panhandle and down into Washington state until co-channel KCRL 780 came on. (or do I have it backwards? Yes, I think a California and Washington pair of listeners complained when KNOM came on the air, because it eliminated good reception of KCRL's classical music.)

Both KICY and KNOM have emergency power generators at their transmitter sites, a necessary provision given the vagaries of Nome's antiquated power system. KICY has studio emergency power also. Electric power rates are roughly three times per kilowatt hour what they are in the lower 48. In 1974 the rate was, I believe, over 9¢ a kilowatt hour, and this was pre-energy crisis.

KNOM also has an aggressive news department, having won several awards and one year delivering more stories to the AP wire than any other Alaskan radio station, including Anchorage and Juneau. Nome is the administrative center of western Alaska up to the North Slope, and there are judicial decisions, BIA affairs, state legislative and even federal legislative hearings, in addition to lively local municipal and school board politics. Lately the native corporations arising out of the Land Settlement Act have been generating considerable news.

While owned by the Catholic Church, KNOM is not an evangelistic radio station. Rather, in keeping with the Church's broad-based cultural approach rather than the usual Protestant evangelizing, it runs a mix of country and rock music all day long, with PSA's directed to the Eskimo to help him cope with living in the white man's world-- financial matters, safety, health and education, etc. A twice-daily meditation and Sunday Mass are the only explicitly Catholic programs. Needless to say, it is the most listened to station north of KYUK and the Yukon territory (that is, the Yukon River Valley), with a clean, strong signal. Since I left the station added two more hours of daily operation, now running 6 am - 12 am (Sundays 7 am on) and the MBS network. The station is completely non-commercial, and its transmitter at the mouth of the Nome River east of town sits on BIA land as a consequence. (Most of the land in Nome is owned by the mining company, which has recently revived gold dredging operations.)

WRTH '77 no longer lists the AFRTS station in Nome which, I believe was on either 580 or 590. The two military installations there in World War II, when the town was a launching base for lend-lease aircraft to Russia, 170 miles away, were closed after the War, and the airbase is now the airport. Nevertheless, the men at the RCA Alaska Communications office on Front Street continued to run the 50-watt station for the entertainment of this isolated community until KICY complained that it was taking away listeners from its Gospel programming. When I was there the RCA people would turn it on at night and let it run till KICY returned at dawn. AFRTS would broadcast the usual Alaskan automated service out of Elmendorf and because of the wretched White Alice phone line quality, the audio would be much worse than the standard lower 48 phone line.

The people of Kotzebue, a town with jet service some 170 miles north of Nome above the Arctic Circle, built their own station, KOTZ on 720 khz with 5 kw fulltime. Alaskan bush radio has some interesting antenna systems, and KOTZ's distinction is that its signal is fed into the FAA long-wire antenna. You read right. I couldn't believe it either, when I went up there to do transmitter watch while the manager-engineer went down to the southern part of the state to cover Kotzebue High's state playoffs (high school teams fly by jet to their games or at least by private craft--a necessity where there is no road system). I asked him how long it took the federal bureaucrats to authorize that one, and he said about a year. The station is really publicly owned, and non-commercial, and the board decided in its initial planning that, given the exceptional construction costs in this permafrost area that thaws for a foot or two for a couple of months in summer, that the only viable means of getting a station on the air was to use an existing radio antenna, and that meant the FAA's hammock long-wire.

The FAA approved, sent some of its men to supervise the actual installation, and there have been no problems. KOTZ, to my knowledge, is the only domestic MW station in the nation running off a long-wire. If you know of any others, you ought to write IRCA about them. Because of permafrost, grounding is nigh impossible in much of Alaska without expensive construction. The station building in Nome (KNOM) was alive with r.f. energy, and when KNOM first went on the air, its signal popped up all over the MW, LW, and SW bands, including the marine distress frequency. The station went back to its consulting engineer, who designed an additional \$2,000 filter system that solved the problem. When the hams opened up their station in Nome, we frequently got their signal all over the production board and every radio in the place.

To get back to KOTZ, "Arctic Circle Radio," its schedule in 1973 was 7am-11pm local Bering Standard time, which is seven hours behind EST. After a low-key morning service program, the day is dedicated to block and format programs for housewives, swap shops, a news and magazine format around noon, dinner music, then harder rock in the late afternoon, easy music and country until 10 pm or so. There are programs in the Eskimo dialect and a reading program where listeners who have a favorite book of any kind, short of porno, can read it over the air. Surprisingly, it has proven popular, as has a classical program done by one of the BIA teachers. KOTZ is located in the basement of the BIA school in quite comfortable studios.

KOTZ is community access radio without all the kooks, and it is immensely popular, despite cable TV. Shortly after the station took to the air the heat from the transmission line melted the plexiglass gauntlet in the wall and the entire transmitter went up in flames. In a week's time the listeners spontaneously raised enough money to put the station back on the air with a new transmitter and building.

"America's Northernmost Radio Station" is no longer KOTZ, but KBRW in Barrow on the Bering Sea. This station was built long after I left, but there was talk of it back in 1973. My impression is that it is owned by the regional native corporation, and almost certainly runs non-commercially. I suppose that the 630 khz station (10kw/5kw) is fairly easy to hear in Europe.

The first western Alaskan, non-AFRTS station was KYUK 580 Bethel. Reportedly the station was authorized at first on a different frequency which, for some reason, proved to be a poor one. The original engineer-manager, it is said, moved the station to the present 580 and then, it is reported, asked for permission. The Feds, interested in promoting bush radio, ignored the situation, or so it is said.

The FCC also ignores the widespread practice, even by Anchorage and Fairbanks stations, of broadcasting personal messages. "Sally, the goods you ordered from Anchorage are on the next Munz Northern flight. Give my love to the children. Tom." "Margie or Joe Whittier, your groceries have been shipped on the Alaskan Railroad 10 o'clock train." Telephone communications between places like Nome are very unpredictable, if they exist at all. VHF links are generally ruled out because of the incredible terrain and immense distances. Short-wave links prevail into the bush, but these are often inoperable due to the northern lights and geomagnetic disturbances. Further, there are thousands of natives and whites who live far from any telephone at all. Commercial radio serves a needed purpose by broadcasting these messages, for if the party to whom the message is directed is not listening, his neighbors will tell him about it. This has been going on for years, and has been written up in Reader's Digest and several newspaper articles. The FCC knows about it, but has enough sense, so rare in a bureaucracy, to know that the sabbath exists for man, and not man for the sabbath (read, rules). Knowing some wide-eyed fanatics in the DX circles who see themselves as an unofficial FCC inspector corps, I write these lines reluctantly for fear that some idiot will make a hullabaloo to the FCC in favor of pristine observance of "The Rules". The funniest message I ever heard was, "George, from Jan. Doe. I'm pregnant. What are you going to do about it?"

A final note about the very different world of Alaskan radio. There are no daytime stations--with reason. In Nome, in June the sun sets at 11 pm and rises at 2 am, and there is enough daylight to take clear color photos at midnight. But in December, the sun sets at 2 pm and rises at 11 am. That, my friends, would be a heckuva radio schedule. Consequently, KNOM does not drop to nighttime power at all for a couple of months a year, while in dead of winter runs at its customary daytime 10 kw for only four hours. Farther north, the sun does not set at all in summer and rises if at all even a briefer time in winter. There is still a good choice of frequencies open to anybody who can find the funds to run a radio station. Note that most Alaskans operate on clear channels. 50 kw operations are few because of the expensive power and light, but most run a good 5 kw or so and get out much farther than they would in the lower 48 because there is no interference.

As far as DYing is concerned, I brought along my Heath AR-13A FM-AM. Since the set needs a 30 microvolt signal at the low end of the AM band, I did not do much DYing on MW. A few nights I could hear KJNP North Pole, or KYAK and KFQD Anchorage. Occasionally Russian and Japanese stations could be heard, but I couldn't tell one from the other. Perhaps a better radio would have helped. We had a good shortwave radio with a longwire antenna that ran a city block, and often we got almost nothing except the CBC Northern Service. I do recall one exceptional evening when I got Seattle, KKHI San Francisco, and an unidentified Mexican station in Spanish. My primary interest was to see if there was trans-polar skip or tropo from Europe. There was none. -30-