

by Joe Snyder

A musical argument was enthusiastically pursued on a recent afternoon at KTEQ radio station, one student disc jockey earnestly defending the integrity of the rock band *RUSH* from a barrage of captious remarks. Time and again the word "quality" was explored in its relationship to music. The *RUSH* fan was eventually drowned out but he seemed satisfied in saving the band's good name from the worst of all possible accusations, his friends did not refer to *RUSH* music as "Top 40". To be labeled Top 40 is the kiss of death at KTEQ.

In 1911, there was no Top 40 music chart. Radio communication was being conceived in the imagination of the American people and had not yet been born. The first public broadcast was nine years away.

The Physics Department at the School of Mines and Technology in Rapid City was anticipating the birth of radio. They obtained the most modern equipment on the market: a simple wireless receiving set. Assembled by Physics Professor C.C. Van Nuys and Superintendent of Buildings and Grounds Willam Coursen, it was a manifestation of the school's innovative instincts. While Van Nuys provided technical knowledge, Coursen contributed the practical know-how. Their transmitter was licensed as a "land" radio station and given the call letters 9XA.

With this new piece of technology, the school could perform an amazing feat: the reception of code messages and time signals from powerful government stations on the East Coast. With little or no government control, 9XA operated at any wavelength, any power, any time they so desired. But the "programs" were all in Morse code.

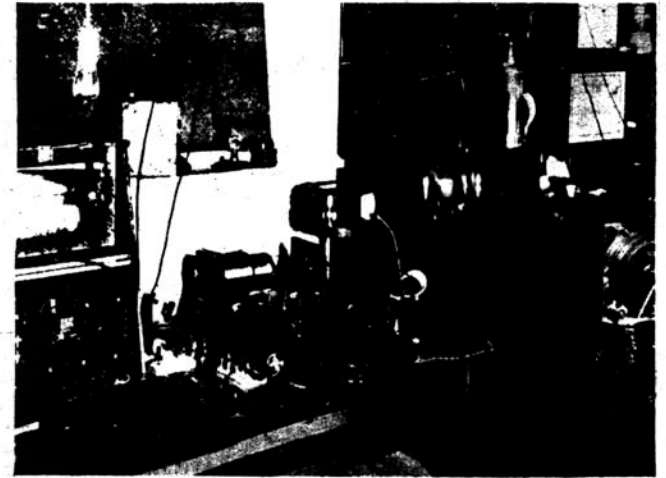
As soon as the Audiron receiver appeared on the market, 9XA acquired one, becoming the best equipped station in South Dakota. When a high spark transmitting set was added, the first regular radio communication in the area was established—with Lead, S.D. The School of Mines radio station became the main link in a chain network with two other northern Black Hills stations, owned and operated by the Homestake Mining Company. Communication was something less than reliable. The stations had to notify each other by mail before radio communication was attempted.

To keep abreast of the times, the brave airwave pioneers at 9XA constructed equipment they were unable to buy, and gained a reputation as the best amateur radio station in the midwest.

In the years that followed, constant improvements increased the range of the station. With the addition of a long range receiving set in 1917, the school began to pick up signals from Germany, but in February, the United States declared war on Germany and a war order was issued for radio stations nationwide to shut down. William Coursen himself was on hand to perform the sad task of dismantling 9XA.

## In The Beginning...

Seventy years ago South Dakota's first licensed wireless radio station started at the School of Mines and Technology in Rapid City. Known back then as "The Wildcat of the Hills", it was a cousin to the present day KTEQ radio station.



The first wireless station in South Dakota.

Soon a new use was found for the school's valuable facilities, training radio operators during the First World War. When the Armistice was signed in November, 1918, the station was immediately re-activated. The quest continued for the best radio equipment obtainable and 9XA became an important link in a new chain of radio relays sending messages coast to coast.

Improvements are in the air today at the KTEQ studio. The station recently went high power, from 10 watts to 750. And they are getting their tower tuned up. But now pride is in the station's format rather than equipment, they bill themselves as the "Alternative" radio station. Alternative to what?

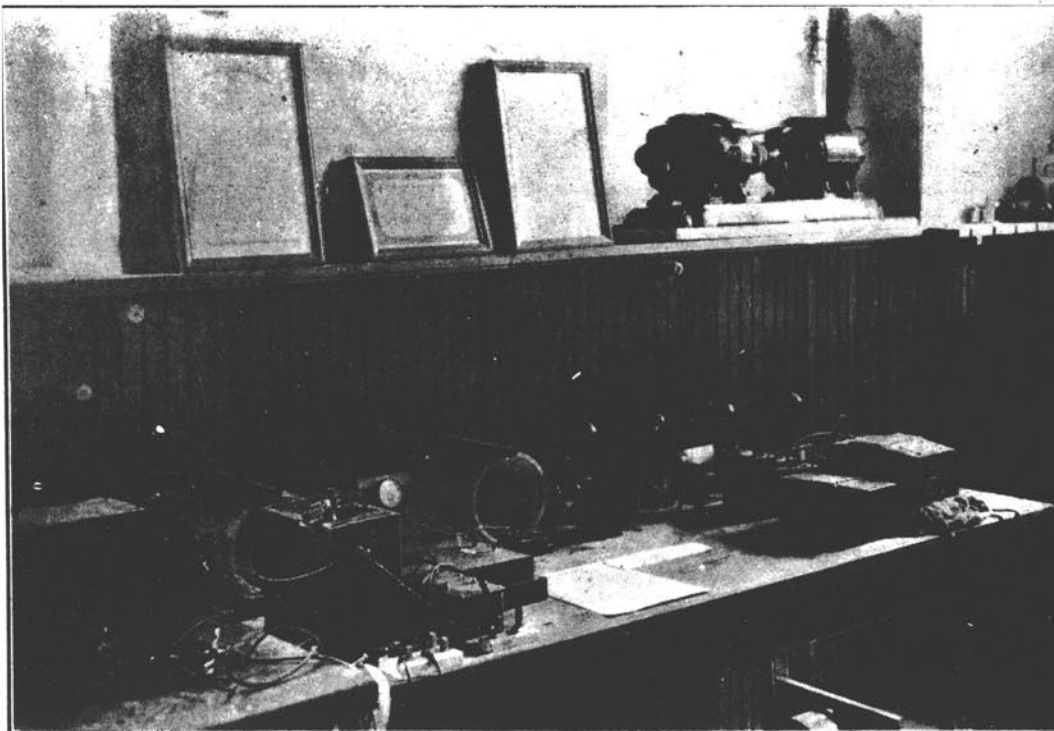
Alternative to stations that play—you guessed it—Top 40 music, says Programming Director Rod Nelson. "We introduce new albums, play new music," he said. "If we think an album is being overplayed we pull it."

"Music is hardly an artform anymore," complained disc jockey Nonie Johns. "Willie Nelson will play in a toilet. I get really tired of the hype."

Individual D.J.'s don't necessarily agree on what *quality music* is, though there is unanimous agreement that it *isn't* Top 40. KTEQ music covers a wide spectrum, including classical, jazz, oldies, new wave, and hard or soft rock.

"We've never had a strong music policy," explains station Co-manager Steve Morgenstern. "We try to avoid the issue altogether by hiring good D.J.'s."

The station is completely run by students, and in its underground, laid-back radio style, almost any student who wants to play disc jockey is qualified for a time slot on the air, providing they have "good taste" and obey the sign in the office that warns: "Do NOT play AC/DC, KISS, Van Halen, Aerosmith, Black Sabbath, Top 40 or disco. D.J.'s who continue to play such trash on KTEQ will be fired." And a couple of D.J.'s have been, for that very reason. Occasional references to "partying" are part of KTEQ's bold image.



An early view of the operating room of WCAT.



Improvements continue at KTEQ today: the building of a new record bin.

Managers and engineers are paid about \$100 a for 20-30 hours of work each week but the student is trying to eliminate salaries. Station volunteers juggle academics with their work schedules. "Our D.J.s will attest to that," smiles Co-manager Jim Boesch.

The D.J.'s are not paid for their time, nor are there any credits to be had — only experience and fun. Recently the word has spread. Once short-handed, KTEQ is now manned (and womanned) 24 hours a day, there is some difficulty finding slots for everyone who wants to do a show. "There are actually people who want to do 3 a.m. graveyard shifts — the hardcores," says one D.J.

In November, 1920, KDKA in Pittsburgh broadcast the presidential election returns and radio communication was revolutionized. By 1922, radio became a national obsession. That year, J.O. Kammerman became head of the Electronic Engineering Department at the School of Mines. He set to work bringing the school up to date by building a two tube voice transmitter. In July, the station officially opened for broadcasting weather forecasts. It became WCAT, the first licensed wireless station in South Dakota. The famous "Wildcat of the Hills" had come to life.

At first they broadcast weather — 45 minutes a day. As listeners grew, a regular Wednesday night broadcast was arranged—a college lecture. Then came news, local talent, and music broadcast by holding a microphone close to the horn of a Victrola phonograph. Definitely not Top 40.

About this time a Native American, Chauncey Yellow Robe, was coaxed into the studio to talk about his adventures in South Dakota before the white man came. At the end of the program, Yellow Robe let out an ear-splitting war whoop that blew out a tube in the equipment. Operations were suspended until a replacement could be found.

The first play-by-play football broadcast came in 1935. An imaginative sports announcer, C.M. Rowes, positioned himself and his equipment on a wooden platform at the top of a ten foot pole overlooking the field. A heavy snow set in on the unfortunate Rowe and electric heaters were sent up to keep him from freezing. Despite the weather, broadcasting continued until just before the end of the first half of the game, when the equipment failed. Upon inspection it was discovered that vapor from Rowe's breath had frozen the microphone. The mike was thawed out in front of an electric heater and broadcast was resumed for the rest of the game.

After World War II, many soldiers returned to the School of Mines to become students. They were interested in radio and many had been trained, licensed operators in the military.

This was Wildcat's heyday. The broadcasting day became longer, with better programs than ever before. A weekly quiz show was initiated. Special radio plays were written and performed for WCAT and a technology program fostered.

But the good times ended when the ex-G.I.'s began to graduate, and replacing technicians became difficult. The excellent equipment became wornout and outmoded. Funds were no longer available for improvements, program quality slipped.

In 1950, WCAT was placed under student supervision. A handful of students fought all that year and the next to keep WCAT on the air. Faculty members, burdened with academic duties, provided little help. Fellow students were too busy to be concerned with saving WCAT. The Federal Communication Commission no longer allowed the operation of their 100 watt transmitter; a 250 watt transmitter was needed. But the administration ruled no funds would be provided until program quality improved.

In desperation, a new series of informative programs was launched. But their tired 25 year old transmitter kept breaking down and hampering production. The FCC issued a final ultimatum to WCAT to install a new transmitter or get off the air.

The \$500 needed to save the Wildcat just wasn't there, nor were the full time technical and studio workers. To the horror of the few students left who cared, FCC informed the School of Mines their license was cancelled and the call letters WCAT deleted. Wildcat was dead.

Few of the KTEQ personnel are aware of their Wildcat heritage. "Wildcat?" echoed one D.J. blankly, "Never heard of it." "I've heard about it," offers Boesch, "But all that's left are the logs of airtime."

KTEQ arose from the ruins 19 years later amid a new generation of faculty and students. It came at a time of heavy student involvement and has grown ever since.

Relations with the student senate, although occasionally strained, remain relatively good. Students at KTEQ rarely get political now; there are no movements like there were in the 1960's. Even draft registration brought no complaints or problems.

On a campus where aspiring organizations are usually met with apathy from students, KTEQ has become a strong, active group of about 100 persons. Their annual \$2000-\$3000 appropriation from the senate has been increased to nearly \$10,000. In a good year, an additional \$5000 may be raised through auctions, tee shirt sales and the soda machine. Advertising is forbidden due to their public service classification.



Co-managers Steve Morgenstern (left) and Jim Boesch in the KTEQ studio seek to provide an alternative to Top 40 music.

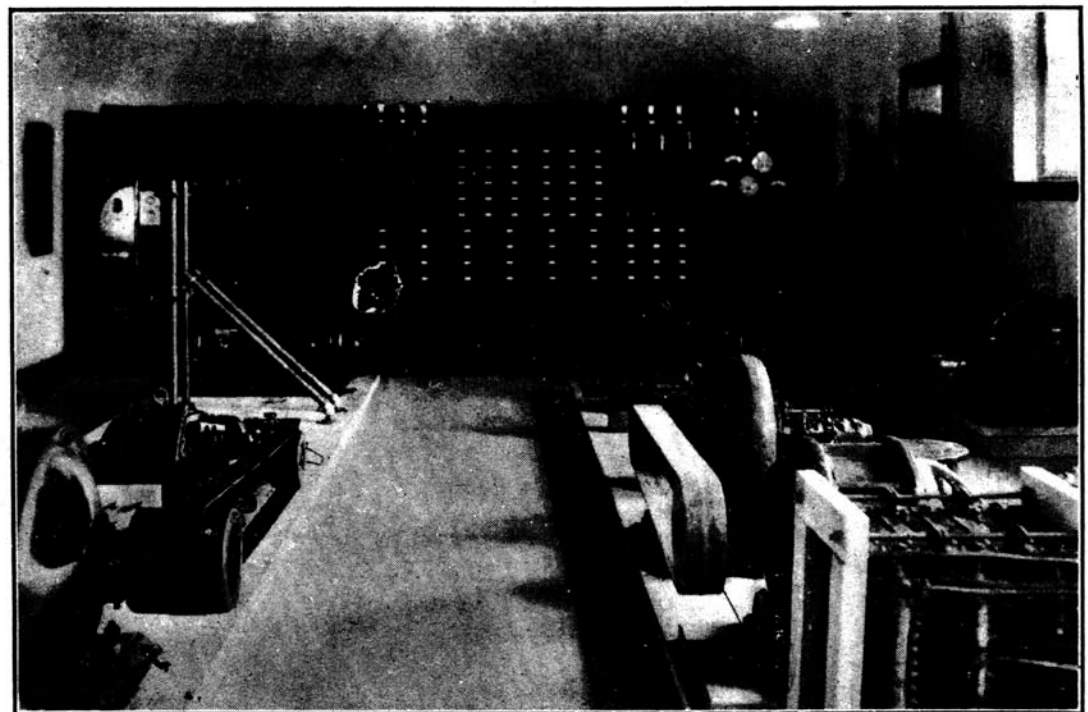
The students in charge at KTEQ are generally a care-free, likable group of individuals who are interested in seeing their station expand its horizons. The Wildcat radio time logs are tucked away amid posters, bicycles, textbooks, and albums. There is a fairly constant commotion of incoming and outgoing students. A recent Saturday found the co-managers adding to station equipment by building a record bin.

The KTEQ studio is a home away from home for many who work there. It is a refuge from the academic world, a place where they can keep each other in good humor and discuss music. They recognize their responsibility to students to keep them posted on school matters, and their responsibility to non-student listeners is, according to one jock, "not playing Black Sabbath or Blue Oyster Cult at six in the morning. That would be cruel."

KTEQ's new boost in power has spread their listenership past the confinements of the campus, through Rapid City, and out to Ellsworth Air Force Base. They must distinguish themselves from three other area rock stations, a job not too difficult for a group of free wheeling college students.

"We've come a long way since 1971," said Boesch one day.

*They've come even further since 1911.*



Switchboard of the Electrical Engineering Department at the School of Mines through which WCAT got its power.