

KNTU: A History¹

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ABSTRACT

In this article, I will report about the history of KNTU as a radio station as well as the key events, people, and things necessary in making it the unique and great radio station that it is. KNTU has things about it that make it different from other noncommercial radio stations, as well as things about it that differentiate it from a common on-campus radio station. Through using local resources in UNT's library, as well as documents and interviews with people from the Radio, Television and Film department at the University of North Texas, I have uncovered KNTU's never before told history.

This article is an account of the history and the significance of the radio station at the University of North Texas. Since KNTU is a university owned station, its first goal has always been to get students involved in all aspects of its operations. It is then fitting that a student writes this history. My research has been primarily conducted through use of archives of contemporary articles written about KNTU throughout its existence, as well as a few oral histories with people involved in that history, that I conducted myself. For 34 years now, KNTU has been on the air entertaining residents of Denton and surrounding areas while giving students at the University of North Texas a chance to be on the radio and to get on-the-job experience before graduating. In 1969 when KNTU was founded, the university was named North Texas State University and had fewer than 15,000 students. In 1981, it became the University of North Texas, and has since grown to a population of over 31,000 students. KNTU also has witnessed a population explosion in the Dallas/Fort Worth Metroplex while maintaining a radio station to serve all who tune in. The Jazz program at UNT, that is now 50 years old, was the world's first jazz program located in a university, and today it continues to be the world's best jazz program. Over the years, KNTU has been improved as a station, although the philosophy behind the radio station has remained the same.

UNT WANTS A RADIO STATION

As UNT became a large university with a growing radio, television, and film division, the creation of an actual radio station was inevitable. Just as a strong biology department could not exist without microscopes and labs to accommodate research, Radio/TV/Film students needed a facility to broadcast radio before graduation.

When the University of North Texas first became interested in a radio station, it was designed to be, "strictly as a voice of the university." (Wilson, 1969) The phrase "voice of the

university” is pretty broad. UNT realized that it would be best to let the new radio station do what the professionals involved knew to be good radio (Fulton, 1986). Dr. Ted Colson was head of the RTVF division during the 1960s. From the time he came to the university in 1961, he wanted to start a radio station. Dr. Colson created the radio station to be a lab for students to get real experience working in a professional environment just as journalism students got to write for the school newspaper (Wilson, 1969). Bill Mercer had been at the university teaching since 1966 but Dr. Reg Holland, chair of Speech and Drama program, recruited him to the university for the purpose of being station general manager once they got a radio station running (Fulton 1986; B.Mercer, personal interview, October 20, 2003; Wilson, 1969). General manager and station engineer were the only full-time positions at KNTU from its beginnings until 2000.

The Federal Communications Commission (FCC) is the agency of government charged with regulating interstate and international communications by radio, television, wire, satellite and cable. In the case of a radio station, the FCC regulates how a broadcast may happen (what frequency, power, time of day) and what may be on that broadcast (such as disallowing advertisements on a noncommercial station). Starting in 1967, Dr. Colson worked a little every day for over 18 months, filling out all the paperwork the FCC required to apply for the various licenses and permits that a noncommercial, educational radio station would need. He had to show a need in the community and explain how the station would be run-in KNTU’s case, by students. By the time he filed all the paperwork with the FCC, the stack was over three inches thick (B. Mercer, personal interview, October 20, 2003).

After many planning meetings and plenty of paperwork, on Monday January 6, 1969, the University of North Texas received approval of a construction permit for a radio tower and all other necessary equipment. At this point, station call letters had not yet been awarded. A

broadcasting permit also had not yet been awarded to the school, but with permission to build a transmitter, the broadcast permit seemed inevitable. The idea of a radio station seemed to be turning into a reality. Although the permit gave the university ownership of the radio tower and station, the university gave operation of the station solely to the Radio/TV/Film division of the Speech and Drama department. (Since then, Radio/TV/Film has become a separate department and I will commonly refer to this department as RTVF.) This permit allowed the station to install a transmitter, antenna, and other equipment needed for a class D-FM station. The radio station planned to air at 88.5 megahertz (a noncommercial frequency) from 4 to 10 pm Monday through Friday (NTSU Radio Station OK'd., 1969). As a noncommercial station, Dr. Colson did not see the station competing with the commercial stations around the DFW market, but instead covering Denton and campus area interests and giving students real radio experience (NT Radio Ready To Go 1969; Wilson, 1969).

Bill Mercer looked for the station's call letters. "I wanted something that had to do with North Texas State, but (K-)N-T-S was already taken. So, I started looking for K-N-T-U." He finally found them, but they were already taken as the call letters for a Coast Guard cutter that had been decommissioned. The Coast Guard had not, at that time, removed the call letters from a ship that would never use them again. So, Bill sent a letter to the Coast Guard, the FCC, and UNT's attorney. The admiral of that ship agreed not to use those call letters anymore and to let UNT's new radio station have them (B. Mercer, personal interview, October 20, 2003). This all paid off and on Monday, June 9, 1969, Dr. Colson announced that UNT's radio station had just been awarded the call letters KNTU (Call Letters KNTU Given to Station, 1969).

During the third week of September 1969, KNTU erected a 50-foot tower on top of the university theater. Since the tower was built, KNTU needed only to perform signal tests and get a

go-ahead from the FCC to start broadcasting (Crewmen Install New NT-FM Radio Tower, 1969). Station engineer Gary Brown predicted the beginning of broadcasts by November 1969. After tests were done, KNTU had planned to begin broadcasts on Halloween night, but the wait for approval from the FCC would delay these plans (FCC Clears KNTU's Way On Equipment, 1969; NT Radio Ready To Go, 1969).

After years of planning and months of building, KNTU was about to sign on. No students were involved yet and very few decisions about programming had yet been made, but that would change very soon.

KNTU SIGNS ON

After the University of North Texas had been around for 79 years and plans for a radio station had been around for at least 10, KNTU signed on the air. This may not have been as glorious an occasion as could have been hoped for, but it certainly was the start of something much greater than thought possible.

“The very first word ever uttered on the air was a curse word,” said KNTU general manager Bill Mercer (B. Mercer, personal interview, October 20, 2003). At the time of signing on, KNTU studios were more filled with confusion than certainty. These students had never been on the air before. KNTU signed on and hit the airwaves for the first time on Monday, November 3, 1969, broadcasting Orson Wells' Halloween classic from 31 years earlier, “War of the Worlds,” as well as President Richard Nixon's policy speech on Vietnam (KNTU-FM Reaches Air, 1969; New Station Operating at North Texas, 1969). KNTU delivered news for the first two weeks without a news wire, borrowing wire copy from KDNT and rewriting stories from local newspapers. Only three days after signing on, a DJ and a newsman were speaking on the air at the same time due to

having separate studios with no communication. This quickly became fixed as the studios were moved into adjoining rooms with a window in between (Kemplin, 1969).

Soon after KNTU was established, KRLD-AM loaned some of its equipment to make live remote coverage of Denton County news and sports possible. The station operated at 250 watts and just barely covered the Denton city area. Soon after signing on, KNTU was allowed to increase power to 440 watts. Formats included popular music, public affairs, live music performances, and university sports.

Early on, although programming was not great, dedication and perseverance by students were remarkable. “It wasn’t the greatest radio you ever heard, but it was a start,” said GM Bill Mercer (B. Mercer, personal interview, October 20, 2003). KNTU was originally located in the northwest wing of the speech and drama building (now the RTFP building). KNTU had only four rooms: a studio, control room, news booth, and lobby/writing area. Mercer was teaching four classes and told them of the opening of a new radio station. Those in his radio and TV announcing class had been ‘playing radio’ in a pretend studio, and some of them jumped at the chance to do it for real. When fall came and the chance to go on the air rolled around, Mercer had a few student volunteers. “So I just gave these people positions. Nobody had any radio experience whatsoever.” Mercer was both the station manager and program director in the beginning. Because students were bringing their own music, Mercer knew he had to do something about programming to make it enjoyable for someone to listen to (B. Mercer, personal interview, October 20, 2003). KNTU developed a station clock telling them when to play what genre of music. They played top 40, big band, rock, and classical at the same time each day and each week. “It was something to behold. I had to train the kids in charge, who then had to oversee the students on the air” (B. Mercer interview, October 20, 2003). KNTU would not adopt a jazz format until thirteen years later.

After KNTU had been on the air a few weeks, the station began to receive phone calls from Denton residents complaining about turning on their TV and receiving KNTU audio instead of the TV audio they wanted on channels five, six, seven, and eight (Kemplin, 1969). Mercer called an engineer friend and asked for help with this problem. The engineer knew right away that cheap audio receivers on old TV sets caused the problem that happened frequently with new radio stations. KNTU kept a list of names and addresses of those who complained. A cheap, simple fix for each TV set at each house was made out of a certain length of cable. This cable filtered out KNTU's audio from the TV. About 25 or 30 people had this done for them. But by this time, many of those with the problems also had been calling the *Denton Record Chronicle* to complain. The *Chronicle* then did a story on the audio problems, which in turn raised awareness of KNTU. "It was really one of those problems that turned into a plus. So, then people started listening" Mercer recalled (B. Mercer, personal interview, October 20, 2003). KNTU had signed on and had a small audience, but how would KNTU grow into the larger, professional station it would become?

THE FORMATIVE YEARS: 1970-1986

How does a radio station with little money and very little experience grow into the station it is today? Mostly through trial and error. KNTU was very experimental during its first few years, but this did ultimately pay off.

Former general manager Bill Mercer said in an interview that "I never felt any control [from UNT]." As KNTU developed, station management did whatever it was that they wanted to do. They were a licensed broadcast radio station with an obligation to serve the community. KNTU also made it a special goal to serve the students. The situation of the U.S. military in Vietnam was a very volatile issue that students wanted to know about. KNTU wanted to cover

whatever it was that students were interested in. When UNT had guest speakers come to campus, KNTU would take the remote unit out and broadcast those speeches. Both anti-war and pro-war advocates gave speeches, and both were broadcast. KNTU even did a live broadcast of a rather large anti-war march on the UNT campus. In 1970, KNTU broadcast election returns. Remote broadcasts were made of the One O'clock Lab Band playing in Lewisville as well as a live broadcast of a lab band every week from the university union. The station broadcast Lake Dallas High School football, Denton High School baseball, and UNT women's basketball. When KDNT did not want to broadcast UNT's men's basketball, KNTU did. KNTU really wanted to give the students all the opportunities available to broadcast various contents on radio. UNT never told KNTU that they could or could not do anything. KNTU's only guidelines were to operate within FCC parameters for noncommercial stations. Current KNTU general manager Russ Campbell said, "KNTU has never had anyone at UNT dictate programming or try to control content or format of (the) station." UNT has never seen a need to do this. UNT helped fund KNTU, but really let KNTU do most of its thing on its own. "That's the way it has to be," claimed Mercer (B. Mercer, personal interview, October 20, 2003). "You have to have good people running the station who know what's good."

Originally, KNTU did not have pledge drives or grants. During the broadcast of basketball games, Mercer and students started looking for grants and support from local businesses. But his biggest problem, as he recalls, is that the radio station had very little name recognition. "We were barely heard outside of Denton," Mercer explained (B. Mercer, personal interview, October 20, 2003). This meant that KNTU had very little money to spend, and was constantly in search of free programming.

In the spring of 1970, KNTU began broadcasting children's programming from 9 am-12:15 pm on Saturday. Bill Mercer said that he was able to acquire the children's radio shows for free from the Canadian Broadcasting Company and the National Educational Radio Network. "They had a tremendous number of produced programs, and we had time," said Mercer (B. Mercer, personal interview, October 20, 2003). Also, the programming was beneficial to the public and helped Denton area families connect to KNTU. These programs gave depth and substance to an otherwise mostly music and news, campus-oriented radio station. KNTU also was airing new educational programming from 5-6:30 pm every weekday. This programming included legal issues, how foreign countries viewed the United States, modern science, modern astronautics, and a commentary on modern poetry. Mercer saw KNTU as better serving its function as a non-commercial station with a variety of educational and community programming (KNTU Radio Sets Children's Shows, 1970).

KNTU also offered new music shows instead of original music programming all the time. Noted Canadian pianist Glen Gould had a show featuring his piano playing and commentary that aired locally on KNTU. Shows dealing with Irish composers and UNT's world famous lab bands were recorded and broadcast on KNTU. Mercer began seeing early on that KNTU should feature jazz as much as possible due to the great jazz program at UNT (KNTU Radio Sets Children's Shows, 1970).

KNTU's hours also were extended from Noon until 11 pm Monday through Friday and 9 am to 11 pm on Saturdays. The previously recorded programming worked well since KNTU only had four or five DJs to cover 69 hours a week. "It was nothing that anyone would want to do today, but it gave us the opportunity to broadcast during the day and on the weekends" (B. Mercer personal interview, October 20, 2003).

Mercer had broadcast Dallas Cowboys radio before teaching at UNT and would leave his position as general manager of KNTU to broadcast baseball, as he had an affinity toward sports broadcasting (B. Mercer, personal interview, October 20, 2003).

Mercer tells the story of his sports people who would always try to make excuses of why they couldn't make it to a game, or why they couldn't get it on air. Mercer would always lecture them that if they don't get it on the air, audiences won't get to hear the game. The game must get on the air. One day, some students went down to Lewisville to broadcast a Denton High School vs. Lewisville High School baseball game. Students called Mercer complaining that there were no open plugs for them to plug their remote unit into to broadcast the game. Since they were there early enough, Mercer guided them into finding a gas station across the street with an open plug, buying a very long extension cord, and running it from the gas station to the football stadium while duct taping it across the street. Needless to say, the broadcast did go on, as it should have. "In this business, you can't and shouldn't give up," said Mercer (B. Mercer, personal interview, October 20, 2003).

Another time, Mercer recalls, Senator Yarborough spoke on campus. It was a windy day and the microphone was popping a lot. When called for help, Mercer asked his reporters to put a windsock on the microphone. He found out later that a student took off his dirty white sock and placed it on the microphone. It startled Senator Yarborough, but it did help with the wind problem (B. Mercer, personal interview, October 20, 2003).

In 1973, KNTU began broadcasting a program called "The World of Photography" on Sunday afternoon (KNTU Features Three Dog Night in Pop Music Program Sunday, 1973). Every Sunday night at 9 pm, KNTU would air a program called "Sunday Spectrum." On "Sunday Spectrum," KNTU aired feature programs on the Beatles (the band), Chicago (the city), and more.

KNTU was also airing old radio dramas. “The Shadow,” “The Golden Age of Radio,” “The Whistler,” “Suspense,” and “Captain Con Man” were each aired at least once a week at 10 pm (Who Knows What Evil Lurks?, 1973). KNTU’s general manager, Henry Kaplan said that they were willing to help any student interested in producing a student drama.

Henry Kaplan, station general manager from 1973 until 1978, spoke of a less professional radio experience (H. Kaplan, personal interview, November 13, 2003). KNTU would have broadcasts from Kaplan’s house as students would come over with a remote unit and a couple of turntables to have a party during a broadcast. A few experiments were made in this time to get on the air 24-hours, but fascination soon waned, and KNTU costs outweighed whatever benefits were afforded.

In 1978, KNTU made a request to the FCC for a power increase from 440 to 6,700 watts. Unfortunately that power increase was a long time coming, and would still take a long time to get. The year 1980 was the first time that KNTU went on the air for a normal 365-day schedule. KNTU was up to 440 watts with a range of merely 15 miles at that time.

In 1981, KNTU began broadcasting at 6,700 watts and had an all-jazz format for the first time (Peabody, 1989). The KNTU transmitter also was moved from atop the Speech Building to a site near Denton State School. These changes more than doubled the station’s listening area. This was also when KNTU first filed an FCC request for an increase in power to 100,000 watts (Medellin, 1987). Learning from their previous mistake, KNTU applied for a power increase as soon as it could. KNTU’s frequency moved from 88.5 to 88.1 MHz at this time.

KNTU introduced its first program guide in 1982, though newsletters have been available since the early 1970s (H. Kaplan, personal interview, November 13, 2003). The program guide is

a publication that has a schedule of programming as well as special events, announcements, and stories about KNTU (Sauls, 1985).

KNTU moved into Smith Hall in January of 1985 (Fulton, 1986). For the opening of the new building and KNTU's new studio, a ribbon-cutting ceremony took place in April of 1985 with 2" of magnetic tape being cut instead of a traditional ribbon (Staples & Sauls, 1985). Smith Hall used to be the home of Denton musician Julia Smith (Fulton, 1986). She once hosted U.S. Vice President Thomas Marshall, but living rooms and bedrooms were turned into studios and offices. The current RTVF chair is Donald Staples and Station general manager is Sam Sauls (Staples & Sauls, 1985).

After wars, moves, and power increases, KNTU was finally ready to become a big time station.

KNTU MODERN AND POWERFUL

KNTU began broadcasting in stereo in 1986. The next big move was for KNTU to increase its power one last time. Very soon, KNTU became as powerful as any station in the United States.

In July of 1986, KNTU received a \$140,637 grant from the U.S. Department of Commerce to increase the station's power to 100,000 watts. KNTU's then general manager Sam Sauls did a lot of work to apply for this grant (R. Campbell, personal interview, October 15, 2003). KNTU was previously operating at 6,700 watts and had been planning for the power increase since 1981 (Fulton, 1986). In August of 1987, KNTU was still waiting for final approval on corrections of coordinates, but once received, KNTU underwent a three-month transformation of equipment to

operate at the new power (Medellin, 1987). KNTU had to file a minor modification after filing paperwork with the FCC that had the transmitter location incorrect by only a few yards. The possibility of KNTU never reaching the 100,000 watt broadcast caused a scare. The benefits of more power were countless, as KNTU would be reaching a lot more people (Jackson, 1987; Medellin, 1987). KNTU could possibly receive more support than ever while doing the best it could to let students receive broadcast experience on the radio similar to a commercial station in a major media market (Fulton, 1986).

In 1987, Russ Campbell became the station's general manager. He served as co-GM from 1989-1992 and from then until 2004 has been the station GM. On Saturday, October 10, 1987, KNTU 88.1 FM received permission to begin construction of a new 100,000 watt radio transmitter (Jackson, 1987). KNTU began tower construction soon after receiving this permit. With KNTU's new wattage it was able to serve an audience of over three million throughout the Dallas/Fort Worth Metroplex. KNTU actually built two antennas on its tower as part of a unique situation: it had to protect a station in Mesquite from interference. KNTU was able to broadcast on the auxiliary antenna on weekends, holidays, summer vacation, or any time the Mesquite station was off the air. The primary antenna had a shaped spectrum so that it would not broadcast as far in the Mesquite direction while that station was on the air (Jackson, 1987). The Mesquite station, KEOM, was only on the air from 6 am to 4 pm Monday through Friday (Hoffman, 1988). Directional FM stations are rare, but KNTU was willing to accommodate another station while trying to get up to the industry standard 100,000 watts. A directional FM antenna had actually never been done before, and the FCC did not even know how to accommodate one (A. Brodie, personal interview, December 5, 2003).

On Tuesday, March 22, KNTU was at last broadcasting at 100,000 watts. At 100,000 watts, KNTU was broadcasting a radius of about 60 miles. Construction had finished building on a new 496-foot high antenna. During this time, the transmitter also had to be moved to a new location (Hadeler, January 1988; Hadeler, March 1988). Campbell remembers personally renting and driving a truck and loading the transmitter. At KNTU, very little was done by professional crews. “Somebody just doesn’t come in and do that. You’re involved in that” (R. Campbell, personal interview, October 15, 2003). The broadcast range had more than tripled, and since it was now reaching south of Denton more effectively, the number of potential listeners had sky rocketed as KNTU reached more urban areas in the Metroplex. After being in the works since 1981, having grant applications for funding made in 1984, grants received in 1986, and FCC permission to build obtained less than six months earlier, this seven year effort had finally ended (Hoffman, 1988). Though the antenna cost about a quarter million dollars to build, over half of that cost was paid for by a grant from the U.S. Department of Commerce’s Telecommunication and Information Administration (Hadeler, January 1988; Hadeler, March 1988).

Because there were then around 40 radio stations in the Dallas/Fort Worth Metroplex, KNTU decided to find its own niche and has carried a primarily jazz format since 1981. No other station in the Metroplex had a wide jazz format (Hadeler, January, 1988). Also, with KNTU broadcasting from the school with the number one jazz program in the world it seemed only logical that KNTU and the UNT jazz program would support each other.

KNTU Up in Flames

With things going well for this young, less than 20-year-old, radio station, it seemed inevitable that KNTU would run into some trials. The station proved how mature it really was and kept afloat despite what could have been crippling blows.

On June 22, 1989, KNTU studios went up in flames as Smith Hall caught fire. This was the first time in KNTU's history that the station was forced off the air. The fire started in the KNTU studios on the south end of Smith Hall, around 2:30 am on June 22. Since the station signed off at midnight, there were no people in the building. Upon arrival, co-general manager Russ Campbell remembers seeing smoke come from the chimney of Smith Hall; this is not normal for a Texas June since fireplaces are usually dormant during the summer (R. Campbell, personal interview, October 15, 2003; Strane & Hemby, 1989). The cause of the fire was never completely resolved, but arson has been ruled out. Arson was never seriously suspected by either fire and police investigators or station personnel. The Denton Fire Department believes the fire was accidental.

Though the fire has never received an official cause, circumstance lead some to believe the teletype might have overheated and caused a flame to ignite on its paper (Strane & Hemby, 1989). A teletype is a computer printer used to print all that comes over the AP wire. If a paper jam occurred and the teletype kept printing on a single line of paper, the print heads could easily heat up enough against the paper that a fire could be produced. After the teletype ignited, because no one was in the building, the fire was not seen until it had caused hundreds of thousands of dollars of damage. Unfortunately, the fire alarm and detection system in the building did not detect it soon enough. A team of fewer than 18 firefighters put out the blaze in less than an hour (Strane & Hemby, 1989).

Damage was not visible from the outside and firemen kept assuring Campbell and Sauls that it was "not that bad" (R. Campbell, personal interview, October 15, 2003). Once they were allowed in, they quickly discovered that it was that bad. Soot covered everything; soot destroyed most of the station electronics. Smith Hall incurred structural and building damages of over \$100,000 (Strane & Hemby, 1989). After initial shock of the fire, co-general managers Campbell

and Sauls had to inventory everything in the office from consoles to records to chairs, and try to arrive at an estimate of damages (Strane & Hemby, 1989). Not only did KNTU reside in that building, but there was also audio and film editing equipment (R. Campbell, personal interview, October 15, 2003). The teletype, a soundboard, reel-to-reel recorders, turntables, cart readers, computers, microphones, telephones, typewriters, furniture, headphones, about 2,500 records and 250 CDs were all lost in the flames. All this damage totaled \$433,000, including building damage. Lobbyists from UNT went to the Texas legislature, put a bill forward for a special appropriation for KNTU and got the bill passed. The state legislature was in session over the summer and appropriated \$433,135 to renovate Smith Hall and replace equipment (Hemby, September 1989). Using this money, KNTU was able to get back on the air with normal operations. “We can be proud that our lawmakers appeared to recognize that the station provided an educational opportunity for students” (R. Campbell, personal interview, October 15, 2003).

Immediately following the fire, before the state funds could come in, Campbell and Sauls realized that if they were to keep on the air, they would have to do something quickly. Station engineer Frank Bonner made an assessment and made arrangements to borrow a console that was picked up on a Greyhound bus later that night (R. Campbell, personal interview, October 15, 2003). KNTU was able to borrow a reel-to-reel, a cassette player, a cart reader, and a transmitter from RF Specialties in Amarillo and Autogram Corp. of Plano. Luckily, two turntables were in their boxes, brand new, and free from damage in a Smith Hall closet. Over 50 station volunteers pitched in and helped get KNTU up and running once again. KNTU was able to get a makeshift studio up and get back on the air after missing only one day due to the fire (R. Campbell, personal interview, October 15, 2003). At 7 am on June 23, KNTU was back on the air.

KNTU had a temporary studio in what used to be TV studio B, but within a few days moved again to a new location in the Speech and Drama building after the lack of communication within a windowless studio led to broadcast problems as news and music talent could not see when each other was on the air (R. Campbell, personal interview, October 15, 2003).

In August 1989, KNTU's numerous relocations after the Smith Hall fire took them into the Historical Building (R. Campbell, personal interview, October 15, 2003). This was KNTU's second temporary home until they were able to once again occupy Smith Hall (Ziesenis, 1989). This may not have been an ideal home for KNTU, but it was better than their first temporary studio in the Speech and Drama building. KNTU's building relocation needs have caused many shuffles and inconveniences for more than just KNTU. As building space was limited on the UNT campus, many departments were willing to accommodate KNTU's needs and knew that the fire was not the station's fault (Ziesenis, 1989).

KNTU hoped to relocate back to Smith Hall in January of 1990. They had moved four times within seven months. KNTU engineer Frank Bonner worked so much that he couldn't wait for things to get back to running smoothly again. He said he put in over 50 hours in just the first four days following the fire (Hemby, September 1989). The fire made things tough at KNTU, but those at the station believed that in the last few years it had improved in all aspects (Peabody, 1989; R. Campbell, interview, October 15, 2003).

MOVE TO NEW, MODERN HOME.

In February of 2000, the Speech and Drama building had been in a renovation process for three years without KNTU ever being included in the plans. KNTU had, in fact, been trying to get a new roof put on Smith Hall for months. Just when KNTU thought the new roof was on its way,

they received a call letting them know that no roof work would be done on Smith Hall, but in fact it would be demolished. KNTU's chief engineer Aaron Brodie then had only three days to complete drawings and designs for KNTU's new studios and offices in the newly renamed RTFP building (A. Brodie, personal interview, December 5, 2003).

Since the renovation process had already begun, some existing framing actually had to be taken out once the new plans were drawn. KNTU's current building space was planned to be four classrooms. The offices were already done and could not be changed, but Brodie was given control over the design of the studios. Although Aaron Brodie had no previous experience designing an entire radio station, he knew how much area he had to work with; he also knew sizes of current facilities and whether they were too big or too small. Brodie's only previous designing experience came one year earlier when he completely re-designed KNTU's DJ studio at Smith Hall. After drawing many floor plans, one was settled upon and given to the architect. The architect then gave back a few alternate plans, but once Brodie explained why they did not work, the architect decided to leave Brodie's final plan pretty much how it was. Brodie intentionally designed rooms with angled walls to deaden sound. Flat, cubed, cornered walls would not have worked as well (A. Brodie, personal interview, December 5, 2003).

These plans soon had to contain detailed room-by-room exact measurements of every data outlet, light switch, power outlet, and location where extra plywood was needed in the walls to mount TVs in the newsroom. Because the building process had already begun, KNTU got pretty much anything it requested in the building. Within a couple weeks of being told KNTU would have to move, a final design was done and building had commenced (A. Brodie, personal interview, December 5, 2003).

All of the studio's furniture was custom made by a shop in California to fit into abnormally shaped rooms; measurements were checked and double-checked so that KNTU could be confident of the size and shape. The furniture arrived weeks before the building was ready to have furniture put in, so students once again volunteered to help move it into another building on campus only to move it into the new RTFP building a while later (A. Brodie, personal interview, December 5, 2003).

After pre-programming five hours of on-air broadcast, KNTU was ready to change studios. A portable CD player was brought from home, hooked up to a portable mixer, and ran on repeat for hours. On April 1, 2001, KNTU began moving its main console, turntables, and various other pieces of equipment needed to broadcast. The new studios already had all the furniture they needed, but the challenge was getting all the wiring hooked up to the equipment so they could start broadcasting from the new studios. The challenge was met, and by the next day students were operating the radio station from its new location. Work was far from over. Many late nights followed with many projects to get the newsroom outfitted like the old studio, but the new studio was in working order (A. Brodie, personal interview, December 5, 2003).

KNTU TODAY

In 2002, KNTU had damage to its tower, but due to state budget cuts received no help from the state government. The repair process was very slow due to having little funding available, but ultimately did reach completion. "We're raising more money now than we ever have, I think it's safe to say" (R. Campbell, personal interview, October 15, 2003).

The KNTU transmitter is about twenty miles north of Denton, housed in a metalwork building at the UNT observatory. The transmitter sends the signal up a 3.5-inch thick coaxial cable

to the top of a 500-foot antenna. There is currently a primary and an auxiliary antenna atop KNTU's tower. Each antenna has its own large coaxial cable running from a transmitter to the antenna. KNTU's main transmitter was over fifteen years old and broadcast at 100,000 watts, while KNTU's auxiliary transmitter was over twenty years old and only allowed 12,000 watts. (Note: when broadcasting, power must be multiplied by 10 in order to reach twice the radius. So, the 12,000 watt transmitter had only about half the listening area of the 100,000 watt transmitter, not 1/10.)

On December 23, 2003, the main transmitter would not turn on. Aaron Brodie switched KNTU to broadcast using the auxiliary transmitter. A few hours later, even the auxiliary transmitter shut off. Aaron made his way back to the transmitter hut with some new equipment to replace sections of the main transmitter, but once he got there he smelled the power supply of the auxiliary transmitter as it had been burned to a crisp. Nothing caught on fire, but all the insulation had melted. Because the auxiliary transmitter was so old, it would have cost more to fix than it was worth. Brodie would repair the main transmitter and turn it on only to have it shut itself off moments later. After working at it for hours by himself, he called in help from KNTU's previous engineer who had installed it, Frank Bonner. Brodie and Bonner even called the manufacturer and they couldn't figure out the problem. Brodie's temporary solution was to hook the exciter directly to the antenna. (An exciter is what turns the music signal into a radio signal, but it does so at a very low power. The job of the rest of the transmitter is to increase that power in stages.) The exciter feeding directly into the antenna broadcast at about 1,000 watts and KNTU could barely cover Denton County, but at least the station was on the air.

Three days later, while going back to the transmitter, KNTU general manager Russ Campbell noticed a large black spot on the 3.5-inch antenna cable. The outer shielding had melted

through the copper at 50-foot intervals. It was subsequently realized that the holes in the shielding were the problems that kept the main transmitter from functioning properly. In shutting itself off, the main transmitter was protecting itself from burning up. So, Brodie hooked the main transmitter up to the transmission cable from the auxiliary antenna and KNTU was back on the air at full strength. The old antenna was slightly more directional than the new one, so KNTU did not have as much coverage to the south.

KNTU now had to take down the entire 500-foot burnt up transmission line and the main antenna to check for damages. The line itself cost \$6,000, plus \$20,000 of labor to take it down, and another \$20,000 to put up the new one. It took until February to get a crew to take it down, and after the new cable had arrived, it was not until May that the crew could get back to install it. During this time KNTU even took down and refurbished the auxiliary antenna.

While KNTU's transmitter was down, the station held a pledge drive. Thanks to some help from WFAA-TV in Dallas mentioning the pledge drive during its newscast, KNTU had a record-setting listening period as well as record-setting pledges. Five months after problems began, KNTU was back to broadcasting using the main antenna and main transmitter. KNTU now has a backup of all the equipment in the transmitter booth to stop this from happening again. It has taken a year to do all of it, but KNTU is now as resilient as it possibly can be. Over the summer, KNTU even ordered a new transmitter because it was operating without a backup until the end of 2003. Luckily, the main transmitter did not ever have a problem, but since it was fifteen years old, it was time to get a reliable 100,000 watt backup (A. Brodie, personal interview, December 5, 2003).

As the station's listening audience has grown, so has the programming standard: from a small number of listeners around Denton hearing a wild, eclectic mix of anything and everything to KNTU listeners all over the Metroplex hearing mostly jazz at 88.1 on the dial, and listeners all

over the world online at www.kntu.fm. Current general manager Russ Campbell said that KNTU's main goals are to "serve the public interest, provide information of interest to the university, provide information of interest to the community at-large, and provide students of any major with a learning environment as close to industry standards as possible." KNTU does receive some underwriting and some support from the university, but most of its operating budget comes from money collected during pledge drives that take place every semester (R. Campbell, personal interview, October 15, 2003).

KNTU is unique in format. There is no other jazz format radio station in the DFW market (although a station or two may carry some smooth jazz). The DFW market has about 80 radio stations today. Almost every conceivable format is being represented, but KNTU is unique in its offering of all kinds of jazz, all the time. Today, KNTU covers Denton county and city elections, city council meetings, UNT athletic events, and live lab band concerts. KNTU is now the only English-speaking radio station in Denton. KNTU airs an original half hour newscast once a day as well as an audio-only version of WFAA-TV's 6 pm newscast (R. Campbell, personal interview, October 15, 2003).

KNTU is also unique in the fact that students are a large part of a professional, broadcast radio station. Most university radio stations with heavy student involvement are never broadcast, but instead delivered to radios by a carrier current on a wire. These students who are not broadcasting are in effect 'playing radio.' Many universities that have big radio stations in large markets at some point make improvements to keep ratings up, but the result is decreased student participation. For example, KUT 90.5 at the University of Texas at Austin has very little student involvement, leadership, or participation. They hire professionals, instead of giving their students the experience that can be gained at KNTU. KNTU has always felt that "one of the most important

things we can do is to provide an industry-standard environment in which students can learn about broadcasting” (R. Campbell, personal interview, October 15, 2003). This makes KNTU unique, especially since it is in a large market with such large coverage abilities. KNTU has trained many professionals who are now employed around the DFW market and elsewhere. “In just about any media outlet you enter in this area, you’re going to find a KNTU connection” says Campbell (R. Campbell, personal interview, October 15, 2003).

Recently, KNTU has received numerous student awards from The Southwest Student Conference and the Intercollegiate Press Association. The Houston Press Association named KNTU the best noncommercial station in the State of Texas. Many students also have won scholarships from the Associated Press (R. Campbell, personal interview, October 15, 2003).

Several part-time student staff members have always run KNTU’s daily operations. Student staff positions have grown in number from about four when KNTU first started to nine today. There has always been a general manager in charge of the station as well as a full-time station engineer. In 2000, KNTU added a program operations director to its full-time staff. All full-time employees also teach at the university. The current station engineer also serves as a news manager working with the student news director helping students report and air the news on a daily basis. KNTU is currently on the air from 6 am to midnight with at least 70 student volunteers (R. Campbell, personal interview, October 15, 2003).

The FCC does provide regulations to KNTU that are extended to all noncommercial stations. The FCC has never contacted KNTU about a problem on air. KNTU has a noncommercial frequency, so the decision is already made. KNTU will never be able to air commercials and could not become a commercial station even if it wanted to. The station is able to broadcast underwritten programming. Businesses can sponsor programming and get their name

mentioned on air, but the FCC has rules as to how that announcement must be made. Certain phrases cannot be said but business promotion is acceptable.

To get a commercial frequency in the DFW market, one must buy an already existing radio station, as there are no frequencies open right now. The cost to buy an existing station on a commercial frequency would be well over 10 million dollars. Also, if KNTU were concerned about being profitable, it would have to find a profitable format and maintain professionalism in all on-air broadcasts. This would make students' involvement at the station difficult, and that was never a desire for KNTU. Instead, the desire was to create an accessible industry-standard learning environment. Because KNTU is in such a major market, it is in both the station's and students' best interests to stay noncommercial (R. Campbell, personal interview, October 15, 2003).

The unique thing about KNTU is its development as a station run mostly by students. Different managers and different students have had different programming ideas, but basically the idea has been learning how to broadcast and speak on the air. At KNTU, students get that experience. Students get to be an air personality for music, news, and sports. Many of Mercer's original students became top executives at different TV and radio stations throughout the nation -- from Texas to California to Wisconsin. "Students did everything; that's the uniqueness about it" (B. Mercer, personal interview, October 20, 2003). North Texas radio graduates are broadcasting for UNT football, the Dallas Mavericks, and ESPN. Over half the staff at The Ticket (sports radio) are North Texas grads. There were so many radio graduates working at KRLD that it was termed the North Texas mafia. Whatever changes have taken place in the last 34 years, KNTU has kept to Dr. Holland's and Dr. Colson's vision of producing great radio people out of our students (R. Campbell, personal interview, October 15, 2003).

KNTU'S FUTURE

Like any organization, KNTU will eventually need additional space as it adds student employees, full-time staff, increases broadcast time, and adds new technology into broadcasts. As much as Campbell would like to think of this as KNTU's permanent home, he knows that isn't reasonable (R. Campbell, personal interview, October 15, 2003).

KNTU hopes to return permanently to a 24-hour day at some point in the future. KNTU also anticipates HD-radio in the future. Said Campbell, "It's going to be expensive; we will be raising money for that somehow." This new digital technology may give KNTU the opportunity to program a second channel. What it will be and what its possibilities may be, is hard to say right now. It may be mostly news, sports, and talk while the primary channel would still be jazz. KNTU really does not know (R. Campbell, personal interview, October 15, 2003).

When KNTU considered the 24-hour broadcast day, the two options they looked at were either subscribing to a satellite service that they could feed or having music pre-loaded into a server with a student DJ pre-recording all the breaks. Neither one requires anyone in the building from midnight to 6 am. KNTU prefers to automate overnight, because if a DJ calls in sick or not enough DJs are around to do a holiday, then KNTU has all the equipment to automate any time. All of the technology is available and cheap enough that KNTU could afford to get it, but many hours of work have to be put in loading music into the server. Today, KNTU's programming is running almost entirely from CDs. New computers and new storage will have to be purchased, but there is no point in purchasing it yet if there are no student volunteers to load music onto servers. If KNTU got all the equipment, and the music department of the radio station was transferring all the music onto servers, then the overnight broadcast would just take the students to program it every day. The biggest reason that KNTU is not taking too many steps towards the 24-hour

broadcast is uncertainty over whether the longer broadcast day will add listeners (A. Brodie, Personal interview, December 5, 2003).

To broadcast in digital, or HD-radio, the most important upgrade KNTU would need is a bigger building to house a new transmitter. Digital radio cannot use the existing transmitter. A digital and an analog transmitter, such as the one KNTU now uses, are combined into one signal to be sent up the tower and broadcast from the antenna. Fortunately, KNTU already has digital consoles and a digital exciter. The only things that needs to be upgraded are the new digital transmitter and a larger building to house it. Once the three new pieces of equipment are bought that are needed to broadcast digitally, it will cost between \$130,000 to \$150,000. KNTU has already had estimates made.

The only reason that KNTU is not broadcasting digitally right now is purely a matter of money and the fact that no one has any radios that can pick up the digital signal right now. The industry is still not sure if digital radio will ever catch on. FM radio is already a fairly high quality stereo broadcast. Digital radio may boast a clearer signal, but this is not guaranteed, just as a digital cell phone still sometimes breaks up. Digital radio is able to broadcast artist, title, and station information, but FM radio can do that now with a service called RBDS (KNTU once used it) and since almost no one has a radio that does that, it does not seem like a reason to get digital radio. One big drawback to an upgrade to digital radio is that FM radios are so common and inexpensive. People usually buy receivers or CD players with tuners, and most people will not buy a bunch of new digital radios when their old ones still play the music. Analog radio will probably be around forever. Satellite radio hardly has any subscribers and many of their feeds are commercial free; buying a digital radio will give a listener nothing they did not have before (A. Brodie, personal interview, December 5, 2003).

Aaron Brodie predicted radio's future to include a more virtual studio with a plasma touch screen monitor that controls a console in a closet somewhere. Brodie also predicts a lot less wires and a lot less in a DJ's control. In 1998 when Aaron first came to KNTU as an engineer, the station was using tape cartridges and reel-to-reel recorders. Today, the DJs only use CDs and KNTU occasionally records broadcasts onto DATs (Digital Audio Tapes). A lot of things today are in servers. In the future, a DJ may not have to do anything except send commands to a computer that does the real work. KNTU's servers use Mpeg-2 file format. Quality is not a problem, but the need of time putting CDs onto servers is the biggest reason why KNTU operates mostly from CDs. "It is becoming harder to find DJ CD players such that by the time these ones go out, KNTU may rely solely on hard drives full of music" (A. Brodie, personal interview, December 5, 2003).

CONCLUSIONS

The University of North Texas has always been an institute of learning that is committed to its students. When the Radio/TV/Film division needed a lab for their students to broadcast from, the university created it. Since then, 34 years have passed by. KNTU has grown, won numerous awards, and produced many professionals who are working in the broadcast industry today.

KNTU has become a major part of the DFW radio media market and is still concerned primarily with providing industry experience to its student volunteers.

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