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2021-01-23 classic rock radio

This is more of an investigative piece. In fact, it's mostly based on research I did several years ago, and I had to go through things again to make sure my information was still correct. Indeed, little has changed, and that's really the point: there is a strange sound in the American West, a curious radio signal, one that has persisted for years. I think I know why.

Anyway, like all good long-form magazine pieces that extract some sort of human story out of a strange financial scheme or whatever, this will start with a personal tale of how I came to learn of the situation.

For some years I lived in the small town of Socorro, New Mexico, population of about 10,000 and county seat of Socorro County, a rural county with a land area a bit less than New Jersey but a population of only 17,000. A quick Google search will give you a strong hint of why I lived there. Moreover, my now-husband lived there for several years after I moved away, and so I continued to make frequent visits until roughly 2018.

When I lived there and for a long time before, Socorro was home to two locally operated radio stations: KYRN "Mine Country 102.1 FM", and KMXQ. KMXQ operated on what I would call a rather unusual format. The station broadcast 24/7 classic rock, uninterrupted by a DJ or advertising. Even the station identification was an absolutely minimal afterthought. It was not clear how KMXQ, despite being ostensibly a commercial station, could make any money. It did not appear that the station had any staff, and I knew a local resident who had occasionally been contracted to perform work on the equipment.

So, the station had already been a bit of a mystery when, around 2017, it changed to an even more unusual format: the buzz. Like a local version of some Soviet numbers station, KMXQ broadcast a continuous, uninterrupted whining tone. It was obvious that something in the broadcast chain had broken, which is not in itself so unusual. What was more unusual is that this situation persisted for at least two weeks, and I believe it may have been up to a month. My recollection is a bit hazy, and unfortunately while I found it amusing enough that every time I drove into Socorro I would tune my radio to see if it was still going, I had not yet realized the situation was interesting enough to take notes.

At some point someone went in and whacked something with a wrench or otherwise made a repair and the aimless classic rock resumed. That's when I started pulling license documents and unearthed a bit of a fun radio mystery. So, here goes my history of Socorro's KMXQ, in which I find that it is just one example of a larger phenomena of mysterious, pointless classic rock broadcast at low power to small towns throughout the Southwest.

I am not sure when KMXQ was founded. The first mention I have found of the station is in 1989, when it was apparently doing well, as the Albuquerque Journal reports the Socorro-based KMXQ joining the Albuquerque metro market via a translator on the Sandia crest. A translator in Truth or Consequences (roughly speaking the next major stop south from Socorro) is also mentioned. The format at this point in time was country, and there are scattered news reports related to the station for the following decade.

In the year 2000, which is as far back as FCC's LMS takes me, KMXQ belonged to a local Socorro resident (likely the original owner) who sold it to a small Colorado radio operation called Roadrunner Radio. In 2002, Roadrunner Radio sold the station to Lakeshore Media of Illinois. So far as I can tell, this was all the normal life of a small-town radio station with low operating costs but insufficient commercial potential to attract an iHeartMedia buyout. Although evidence is sparse, the country format seems to have been unchanged during this time period, and the operators were (at least attempting to) fund the station through advertising. Neither of these companies seem to have survived to the present day, presumably victims of the great squeeze in the conventional advertising industry and decreasing interest in radio.

Following the intrigue of this story, as it starts to get stranger, will require some understanding of the licensure and regulation of commercial radio stations in the United States. The radio spectrum in general, and especially the broadcast FM spectrum, is a valuable shared resource. To avoid waste of this limited total capacity, the FCC has a system of regulations which is intended to ensure that radio stations make good use of the spectrum that they have been allocated.

While the details can be quite complex, and go as far as the FCC specifically granting radio stations permission to broadcast formats (e.g. genres of music) only if that radio market is not already "well-served" in the requested format, one of the simplest rules is that broadcast FM stations are required to, well, broadcast. Failure to broadcast the licensed format for the licensed hours at the licensed power is grounds for the FCC to revoke the station's license, because they are failing to provide the service that they promised when they were first granted the license. This should free up the frequency to be used by another radio station that will offer a better service to the community.

At some point in 2005, Lakeshore Media requested from the FCC permission for a Special Temporary Authority (STA) to operate the station at a transmit power less than that specified on the license. Around a week later they informed the FCC that they had returned to normal transmit power. This is very typical for a radio station and especially a small one; if the main transmitter or antenna malfunctions or is damaged the station often has an auxiliary transmitter and antenna which are capable of a much lower power level (as low as 25 watts) for emergency use. The station may switch to this low-power auxiliary transmitter while making repairs, and while they must request permission from the FCC to do so it's quite common for this to happen for short periods. Socorro is prone to occasional severe thunderstorms with high wind and large hail, and this is exactly the kind of thing that takes out radio antennas, requiring the use of a temporary low-power antenna until replacement parts can be obtained.

Stick a pin in that, though: it is common for radio stations to reduce their transmit power under an STA for short periods due to damage, malfunction, or other transient problems with the equipment.

In 2009, Lakeshore Media sold KMXQ to Cochise Media Licenses, LLC of Wyoming. It is not unusual for media companies to use a subsidiary to hold their radio licenses which has a name alluding to that purpose, but nonetheless the name of this entity may seem poignant later on.

Shortly after the purchase, Cochise filed an application for minor construction related to the station. This application specifies a transmit power of 6kW from 56 meters above ground level. It is difficult to tell how much of a change this represented from the previous station (if at all), but the application was most likely filed due to replacement of equipment at the station.

When a radio station requests authorization for construction (whether a new facility or modification of an existing one), the FCC requires that the station report when construction is completed. This is somewhat amusingly referred to as consummation of the construction. This is particularly important since it is typical for the radio station to be off-air during the

construction period, which is normally not permitted. In general, a 90-day period is allowed from the date of the construction application to complete work. A bit longer than 90 days later, though, Cochise filed with the FCC a request to extend the consummation deadline by a further 90 days. About 90 days after that, Cochise reported that construction was complete (consummated).

On the very same day, Cochise filed an application for an STA permitting the station to go silent. This application was backdated (not entirely unusual on its own) such that the period of silence started immediately at the consummation of construction. The reason for the silence is listed as "Financing" and the justification given is only that the licensee has requested silence for the station related to the construction application.

The FCC issued the STA with a note that, as a matter of statute, the station can only remain silent for 180 days or the license will be forfeited. At this point, between the station evidently running over its construction timeline and then immediately filing to remain silent and the FCC taking some time to respond, 9 months have elapsed since the purchase, during which the station was presumably inoperative.

Nearly a year passes. In theory the FCC would have terminated the license at 180 days but it is clear from other cases that this often does not happen, seemingly because the FCC does not necessarily actively follow up on these STAs.

In March 2011, Cochise files for an STA to operate using a modified antenna system. The specifications are listed as 6 meters above ground at 65 watts transmit power. They have purchased a new, smaller antenna and mounted it near the bottom of the (fully owned) tower at the station's small headquarters. Shortly after this filing, they report that they have resumed operations.

In September 2011, two years after the purchase, Cochise files another request to extend the STA to use the lower antenna and power. Keep in mind that they had reported completion of the construction of the 6kW, 56m-high antenna 18 months prior, so while they claim to have completed this system, in over a year they have not used it.

In April 2012, two and a half years after purchase, Cochise requests a further STA to make use of the licensed antenna, but at a transmit power of only 137 watts. The application says that this STA is "pending installation of a higher-power transmitter." Only eight days later, they apply for a modification of the license which will make 137 watts the permanent, licensed transmit power of the station.

Eight months later, December 2012, Cochise applies for permission to go silent in order to "reconfigure the operational aspects of the station." A few weeks later they file again stating that more time is required. Eight months later, additional time is requested again, still for "reconfiguring operational aspects."

A week later, a new construction permit is filed, once again for a 56 meter high antenna at 6kW power.

November 2013, KMXQ reports that it is resuming operations.

At this point, Cochise has owned the station for about four years. For the entire duration of those four years, the station has either been silent or operating at a severely reduced power. In fact, if I have managed to follow the dates correctly, the station was only operational in any form for about 1/3rd of this time period.

A further silence is requested in 2014, due to "operational issues," but this appears to have been somewhat more routine as operations resumed only a month later. So far as I can tell, the

2013 construction was never consummated. The station is licensed for only 137 watts power to this day.

To some extent, this is just a story of a radio station being purchased by an operator who was perhaps not prepared for what they were getting into. They seem to have struggled for years with installation of equipment, likely due to financing issues. Ultimately they gave up to some degree, operating the station permanently at much lower power than originally licensed, apparently due to trouble with obtaining a new transmitter.

While the station stops being a constant source of filings related to operational problems in 2014, the station continues to be unreliable to this day with surprisingly frequent outages and technical problems, apparently a result of its completely absentee ownership, lack of an on-site engineer, and limited funding.

What makes this far more interesting, and will hopefully make you feel like getting through that slog of filings was a bit worth it, is that this situation, with stations owned by these people, is far from unusual.

Cochise Media Licenses is owned 50/50 by Ted Tucker Sr and Jana Tucker, a husband and wife. Along with their son, Ted Tucker Jr, they own at least six different entities, for-profit or non-profit, which hold radio station licenses. While the behavior of these entities is not completely homogeneous, I am referring to them collectively as "Cochise" for simplicity. That said, I do want to point out how much I appreciate the name of one of the entities: Desert West Air Ranchers, which may also seem poignant later.

By my somewhat outdated research, this collection of companies has owned, at various points, some 42 radio stations. Most of these stations are located in small towns in the American West. Most were purchased from owners who were undergoing financial struggles. Many have had their transmit power reduced far below their original operation, and most operate or operated at less than 1kW. At least 13 remained silent for such long periods of time that they eventually become subject to an enforcement action by the FCC---a regulatory agency of the government perhaps best known for how incredibly reticent it is to actually enforce any regulations.

In 2017, the FCC entered a consent decree with a collection of (but not all of) the Tucker-owned radio companies which required them to surrender a portion of their radio licenses to nonprofit or other organizations, as a condition of the companies being allowed to renew any of their existing licenses. The FCC took this action due to "long-term chronic failures to operate" their radio stations, saying that it was not at all unusual for radio stations purchased by Cochise companies to experience "operational issues" almost immediately after purchase and go silent for several years---just like my own experience with KMXQ. As a further condition, the FCC limited the renewals of Cochise radio licenses to a 1-year term, which would only be extended if the stations met requirements for their operating schedule.

This was not the first time that Cochise had an outright run-in with the FCC. They have also been subject to a number of more minor enforcement actions, either over failure to operate their radio stations or administrative problems such as providing contacts on the licenses which were not actually contactable---post office boxes that no one checks.

By the time of this consent decree, though, many of the Cochise stations seem to have finally become more reliable again. This was likely a result of Cochise trying, but failing, to head off the FCC's slow enforcement process. There is so little information that it is hard to be sure, but it seems to have been around 2015---during the time period when many of these stations were constantly off-air---that Cochise invented the 24/7, ad-free, everything-else-free, classic rock format.

Searching the internet or newspaper archives will turn up various newspaper reports about Cochise classic rock stations, many of them framed as lighthearted general interest pieces about the nature of that weird local station that runs classic rock with no ads. These reports often make particular mention of how odd the stations playlists are, giving most of their time to relatively 'deep cuts' rather than running the hits of the genre, and doing everything in apparently random order. The articles often mention the very spotty reliability of these stations. How do they make money? Why do they exist? Who owns them?

Deepening the mystery and adding an odd bit of sinister intrigue to such light-hearted articles is the private nature of the Tuckers. It's unclear where the Tuckers actually live, most of their businesses are registered to PO boxes around the country, and no one involved responds to voice messages or emails.

Only a couple of newspapers have scored interviews or statements from the Tuckers, and these tend to get repeated around since so little else is known. Tucker talks about using the stations as a "personal iPod," as while the programming is fully automated he evidently has the ability to edit the playlists by remote control. He describes the stations as being something like a hobby project, and does not venture to explain what his motivation is or how or if he profits from the stations. Overall, he tends to present an image of being eccentric but benevolent, although he stridently avoids discussing the actions taken against the companies by the FCC.

Not all of the Cochise stations are so aimless. Some of them, particularly those licensed to entities owned by Ted Tucker Jr, operate as apparently normal local radio stations with higher transmit power, advertising, and typical music formats.

In general, though, Cochise seems to operate on a simple but strange pattern: They locate a small radio station in a small market whose owner is looking to sell, often because of financial difficulty. They purchase the station and, through a slow and often halting process of regulatory filings, modify the station to run at a much lower transmit power. When the station resumes at the new power, it broadcasts a completely automated classic rock playlist with no other content. Some interviews seem to imply that Tucker and his son do most of the physical work on the stations themselves, although they evidently use radio engineering contractors as well.

The whole story of Cochise seems to be one of obtaining as many radio stations as possible and then operating them as cheaply as possible, through eliminating staffing and maintenance and switching to more compact, lower maintenance equipment. This isn't bad, exactly, but it's also not exactly good, as it tends to deprive small towns of radio stations that are actually operated by and for the community.

In a way, the automated classic rock broadcast by Cochise stations is just dead air... but louder. It's a way of "parking" the stations so that they are nominally fully operational, but practically in cold storage, just a compact transmitter and computer idly running in a shack that used to be a radio station.

All of this leaves the question: why?

It is my belief that the Tuckers and their peculiar radio empire are, in actuality, speculatively investing in radio spectrum. By purchasing a large number of radio stations and keeping them nominally operational (but at low cost) they create a situation in which they are allowed to remain the practical "owners" of a generous chunk of FM spectrum throughout multiple states.

At present, the value of this spectrum is fairly low. Small-town radio is not a great business

to be in and these stations regularly sell (not just license but real estate, equipment, branding, etc) for prices below a half million dollars. However, I think that the Tuckers believe in one of two eventualities:

First, that due to regulatory or other changes there will be a Renaissance of small radio markets that leads to major players like iHeartMedia gaining an interest in buying into these markets. Like real estate investors, the Tuckers will find themselves "in the path of growth" and sell the stations for well more than they bought them.

Second, and I believe the more likely scenario, the Tuckers are hoping that broadcast FM radio will undergo a technological transformation which makes the spectrum more valuable---perhaps by repurposing FM radio stations for broadband data delivery. As far back as the '90s there have been developments that might feel like the early stages of this process, with subcarrier and digital encoding methods being used to add overlay services like real-time traffic updates to FM radio stations. HD Radio might be seen as another major step in this transformation.

On the whole, all of these "new age broadcast FM" technologies have failed to gain significant market traction. However, it is easy to imagine that currently ongoing developments like self-driving vehicles and 5G cellular networks could create yet more incentives to find ways to use broadcast FM (still the leading way to deliver content to vehicles) for high-value infrastructure applications.

If this does happen, if someone suddenly feels the need to build out a broadcast FM data delivery network that spans the nation, or even if the market deteriorates to the point where the FCC desires to repurpose the bandwidth, the Tuckers will once again be in the way and ready to negotiate.

This is all, of course, speculation on my part. It's quite possible that I'm wrong, and perhaps the leading evidence in that direction is that, in my opinion, I don't think this scheme will ever work. There are few actual signs of impending higher demand for broadcast FM spectrum, and so it's hard for me to imagine that the Tuckers multi-million-dollar investment (I would guess at least \$10mm) in rural radio stations will ever pay out. But maybe Ted Tucker Sr and his wife and son know something that I don't, or at least think they do. Hell, at least it's more fun than buying stock in post-bankruptcy Hertz.

At the end of the day, though---and this is where I get a little too contemplative---are the Tuckers really doing anything that different from the rest of the radio industry? While iHeartMedia has a much clearer path to revenue through advertising, they, too, seem to be buying up as many radio stations as possible in order to operate them as cheaply as possible, extracting what little worth remains in the industry while destroying its actual relevance.

I'm not convinced that the rumors of iHeartMedia radio stations being run remotely from Salt Lake City are true, DJs in an office complex spinning hits for the far side of the country like a whimsical version of UAV pilots in sea containers, but at the same time I have personally heard a major Albuquerque radio station's supposed local traffic reporter completely butcher the pronunciation of "Montaño Boulevard." Maybe it was their second day on the job after moving into town, but perhaps more likely, maybe they were somewhere far away reading from maps of unfamiliar places.

Ted Tucker, I have read, will queue up songs he wants to hear on his radio stations as he drives through their coverage areas. I'm not sure IHeartMedia cares that much.

Postscript: I am sometimes wary of writing about topics which are too far from my established beat of obsolete computing and telecoms because, well, that's the industry I work in and most of what I think about. That said, in my free time, I generally spend more time on

technology-centric Cold War military history and environmental contamination, remediation, and related land-use issues than I do on computing. I will probably write more about these topics in the future and am also thinking on making some YouTube videos in which I more or less narrate aerial images, since it's more interesting to discuss these topics visually. Perhaps let me know what you think.