Testimony of Mr. Justin C. Ahasteen,
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Before the House Committee on Energy and Commerce
Subcommittee on Innovation, Data, and Commerce
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Yá'át'ééh (Hello) Chairman Bilirakis, Ranking Member Schakowsky, and distinguished members of the Subcommittee:

I am here today on behalf of President Buu Nygren of the Navajo Nation. As the Executive Director of the Navajo Nation Washington Office, it is my duty to advocate for the interests of our people and to ensure that our voice is heard on matters that significantly impact our community.

The Navajo Nation encompasses more than 27,000 square miles across three states—Arizona, New Mexico, and Utah—making it the largest land area retained by an indigenous tribe in the United States. Our lands are vast, beautiful, and, in many places, remote. This remoteness is both a source of strength and a challenge, particularly when it comes to communication.

Access to reliable communication channels is a critical aspect of public safety, democracy, and community cohesion. For the Navajo Nation, AM radio has been, and continues to be, a vital lifeline that threads through the fabric of our daily lives. To help this committee understand why Amplitude Modulation ("AM") radio is important to the Navajo people, I want to share a brief history of KTNN.

Background on KTNN

Many tribal nations, like the Navajo Nation, are spread across remote and rural communities. Unlike their larger urban and suburban counterparts, tribal communities do not typically have population centers large enough to support local commercial radio stations. Due to their distance, the signals from popular Frequency Modulation ("FM") stations are frequently out of range, leaving tribal communities reliant on AM signals to tune in to the world around them. Of

course, the content was not always relevant to community members, but most were able to get at least some access to basic news and entertainment.

Beginning in the early 1970s, various tribes across the country began to invest in tribally controlled radio stations to fill a gap in radio service for tribal communities. Tribally controlled stations would focus their news coverage on issues that were important to tribal communities. Inspired by the success of other tribes, the Navajo Nation decided it was time for the Navajo people to join the airwaves.

KTNN, also known as "The Voice of the Navajo Nation," was established in 1986 by the Navajo Nation Council. Operating from its headquarters in Window Rock, Arizona, KTNN serves as the primary radio broadcaster for the Navajo Nation. One of the primary purposes of the new radio station was to ensure Navajo elders who had limited English ability could be kept up to date with important community announcements in the Navajo language. That mission remains alive and well today.

KTNN's programming reflects its commitment to serving the Navajo community, blending traditional Navajo chants with the country music that's so popular with our people and providing essential news and community announcements. Over the years, the station has experimented with various Navajo-language programming initiatives, including broadcasts of Phoenix Suns basketball games. Despite changes in technology and staffing, KTNN has remained steadfast in its mission to provide relevant and engaging content for its listeners.

But the Navajo Nation is vast. As mentioned, the reservation covers over 27,000 square miles—that's bigger than West Virginia. And the most remote residents of the Nation are those most likely to communicate primarily in Navajo and needing this radio service. For that reason, the decision was made right from the beginning, that the station would be built as a primarily AM

station, though an FM channel would eventually be added as well, to ensure the signal reached as many Navajo citizens as possible.

The FCC designated the 660 AM frequency for class II-A use in Arizona, with the understanding that the expansive territory and limited media access of the Navajo Nation warranted a powerful signal centered in Window Rock rather than in larger urban centers like Phoenix or Tucson.

Despite the complexities of navigating FCC regulations and technical considerations, KTNN successfully launched as one of the last new 50,000-watt stations on a clear channel in the United States. Thanks to this FCC approval, almost every corner of the Navajo Nation can access KTNN during the day, and on a clear night you can even tune in from a regular car stereo while driving hundreds of miles away in Salt Lake City, Utah or Los Angeles, California. That is the power of AM radio.

Difference Between FM and AM Radio

As this committee is surely aware, there are some significant differences between AM and FM radio signals.

AM and FM both transmit information via electromagnetic waves. In AM, the amplitude of the signal or carrier is modulated according to the information, while the frequency remains constant. On the other hand, FM technology encodes information by varying the frequency of the wave while keeping the amplitude constant.

This difference in the forms of delivery results in various pros and cons for each technology.

The most obvious pro for FM stations is that the sound quality is significantly better than on an AM station. The improved sound quality led to a surge in the popularity of FM radio in the 1970s

and 1980s, particularly for music stations. Most motorists, myself included, prefer listening to FM stations over AM stations if given the option.

That's one of the reasons KTNN also broadcasts over FM. I can understand why car manufacturers may think there is no longer a need for AM-capable radios when you're driving in urban and rural communities. But looking just at the sound quality ignores a huge failing of FM radio.

Under the best of circumstances, FM stations can only broadcast out to about 60 miles. This works great in the suburbs, but it becomes impractical when driving in a place like the Navajo Nation. The KTNN FM signal doesn't extend much beyond the Window Rock area. Places like Kayenta, Shiprock, and Tuba City are just out of luck. But the AM station, though of a lower sound quality, reaches all of those places. We would have to build dozens of transmitters across the Navajo Nation in order to get that kind of coverage with FM stations, which is economically impractical. The only real solution is AM radio.

Public Safety Concerns

The availability of AM radio does not just have entertainment value, but it also has very real consequences for public safety. The Navajo Nation has poor cell coverage even in our major population centers like Window Rock, and only about 4% of our people have broadband quality internet access. They rely on AM radio for crucial public safety updates. There are times where our Nation will have a public safety emergency, like the recent train derailment that shutdown the I-40 at the Arizona-New Mexico border this past week. AM radio allows our people to be warned of the danger before they have driven too far.

For example, a Navajo elder driving the 120 miles from Kayenta to Window Rock could be warned of flooding in Chinle on an AM station, allowing them to plan an alternate route before it's too late, but only if they have access to AM radio in their car. There are no FM stations that will provide consistent coverage for most of that journey, cell phones won't work for most of the journey, and satellite options like Sirius radio are cost prohibitive, not to mention the Sirius news stations don't broadcast in the Navajo language and generally focus on national news alerts rather than local and regional issues that might affect our Navajo drivers.

Additionally, our emergency alert infrastructure incorporates the Emergency Alert System (EAS), where the Navajo Nation radio station operates as a Primary Entry Point (PEP). This station is crucial for the propagation of emergency alerts to the public through a 'daisy chain' system, ensuring that messages reach even the most remote and rural areas within the reservation. The farreaching capabilities of AM transmitters, along with their resilience, are why our most remote communities across the reservation exclusively use and rely on AM radio to stay informed with current world and local news in the Navajo language.

Closing

In closing, I implore the members of this Subcommittee to recognize the unique and indispensable role that AM radio plays for the Navajo people. As we work to bridge the digital divide, we cannot afford to undermine the existing tools that serve our community so effectively. I ask that you consider the lifeline that AM radio represents for the Navajo Nation and other similarly situated communities across the country and work with us to ensure its continued operation, especially in vehicles, which are often the hubs of information in our rural landscapes.

Thank you for the opportunity to testify on this matter of great importance to the Navajo Nation. I am open to any questions the Subcommittee may have.

Ahéhee' (Thank you)