

TESTIMONY OF JAMES M. TRACY
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The Broadband Incentive Auction: Update on Repacking Challenges and Opportunities

Before the House Committee on Energy and Commerce
Subcommittee on Communications and Technology

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Summary

Jim Tracy is testifying as chairman of the National Association of Tower Erectors, a non-profit trade association in the wireless and broadcast infrastructure industries. NATE's 825+ member companies construct, service or maintain hundreds of thousands of communications structures, including towers as high as 2,000 feet above ground level, across the United States. Accordingly, they are actively involved in a number of national priorities, including expanding broadband and helping to advance emerging communications programs and technologies. Of paramount importance to NATE is ensuring that all work be undertaken as safely as possible; proper education and training of tower personnel, which can take considerable time, is critical. However, while there is an enormous amount of tower work opportunities, there are not at present enough qualified workers to perform all that work. And those opportunities are expected to surge as a result of such mandates as FirstNet, tower marking mandates, and the repack. Qualified NATE contractor companies and equipment suppliers will be performing essential tower work pursuant to the repack by safely deploying thousands of new antennas and wireless equipment on broadcast and cellular communications structures located across the country. NATE believes that the marketplace will ultimately dictate the time it will take to achieve the transition resulting from the repack. Its priorities and focus during this transition will be to provide the broadcast and wireless industry workforce with the safety, standards and best practices resources needed as well as the necessary education and training to conduct their jobs in a safe and efficient manner. Moreover, NATE will continue striving to expand the size of the workforce capable of working on telecommunications towers of all heights, and will ensure that those workers are properly educated and trained.

Testimony

Madame Chairman and Members of the Subcommittee, my name is Jim Tracy. I am the CEO of Legacy Telecommunications of Burley, WA. I am testifying today on behalf of the National Association of Tower Erectors, also known as NATE, where I am honored to serve as its Chairman. NATE is a non-profit trade organization in the wireless and broadcast infrastructure sectors. NATE's diverse membership encompasses all layers of the communications infrastructure ecosystem and includes over 825 member firms. We construct, service and maintain hundreds of thousands of communications towers and related structures throughout the United States and nine other countries.

NATE member companies are and will continue to be on the front lines of the Broadcast Repack transition activities, the FirstNet Public Safety Network deployment work and the densification of networks in the run-up to make the next generation of wireless, 5G technologies, a reality in the near future.

NATE's mission statement focused on the core principles of safety, quality, standards and education was drafted 22 years ago when the Association was founded. These values remain the guiding principles of the organization today.

In recent years, NATE has continued our pledge to safety in a variety of ways, including through expanded collaboration with federal agencies including OSHA, the FCC and the FAA. In addition, we have developed a variety of safety and education programs and tools for our members, such as the NATE STAR initiative. The initiative is a voluntary program in which participants commit to higher levels of training, regular unannounced site safety audits and the implementation of heightened safety documentation while adhering to industry best practices.

I also wish to bring to your attention NATE's Broadcast Repack safety video, which is designed to educate the communication tower workforce and provide an overview of the unique rules and challenges associated with conducting work on broadcast towers. Greater detail on this and other NATE initiatives is included at the end of my written testimony.

Additionally, we partnered with the American National Standards Institute and the American Society of Safety Engineers to finalize and implement the first comprehensive safety standard encompassing the entire tower construction, service and maintenance industry.

Further, the National Wireless Safety Alliance, a broad coalition of industry experts of which I was the founding president, has established a comprehensive program to ensure ANSI accredited tower technician certification and credentialing as a means to enhance safety, increase workplace accountability, reduce risk, improve quality and encourage training.

Through these and other efforts, we are building, maintaining and modifying communications towers faster and more safely than ever before. But there is one inescapable fact: there are not, at present, enough qualified workers to perform all the tower work we will be required to complete.

Today, I am the voice for an estimated 30,000 tower industry workers – who we refer to as tower technicians. Many of these men and women are employed and trained by NATE member firms. Yet the workforce challenges our industry faces just to meet current communications demands will be exacerbated not only by the repack, but by the establishment of FirstNet, the move to 5G, and perhaps the tower marking mandate included in last year's FAA reauthorization as well. America's demand for a ubiquitous footprint of always available, high speed networks is creating the "perfect storm" for our labor force.

Nevertheless, NATE is committed to collaborating with our friends and stakeholders from both the broadcast and wireless communities to ensure a safe repacking transition on the nation's communication towers. Our qualified contractor companies and equipment supplier members will be performing essential tower work pursuant to the repack by safely deploying thousands of new antennas and wireless equipment on broadcast and cellular communications structures located across the country. This important infrastructure work is paving the way to enable emerging technologies and networks that are capable of meeting the country's connectivity and data needs for a productive and competitive future.

We believe that the marketplace will ultimately dictate the time period it will take to achieve this transition. NATE's priorities and focus during this transition will be to provide the broadcast and wireless industry workforce with the safety, standards and best practices resources needed as well as tools for education and encouragement to train to conduct their jobs in a safe and efficient manner.

In addition, we will continue to recruit and expand the size of a trained and capable workforce prepared to work on telecommunications towers.

It's not enough for men and women to say they want tower jobs. They first have to be willing and physically capable to climb to and work at elevation. While there are many thousands of communications towers less than 200 feet high, broadcast towers can reach 2,000 feet high. These highly skilled positions must be filled by people sufficiently educated and trained in proper techniques and in the use of the requisite equipment. This is not a quick undertaking. We can get a climber through rudimentary safety training in two weeks but he or she needs at least a year on the job to become competent at a specialty in which the employer works.

A cellular antenna can range from 20 to almost a hundred pounds. They will be between 4 and 10 feet in height and usually only a couple feet wide. They typically reside on a tower or rooftop within a few hundred feet of ground level. Conversely, the broadcast antennas that are being changed out can be a hundred feet tall and weigh tens of thousands of pounds. As I mentioned, broadcast antennas also can reside as high as 2,000 feet above the surface. Skill sets required for the two differing disciplines of work are more than equipment variations. The people who perform the work need different skills and mindsets to accomplish this under time constraints and budgetary pressures.

In conclusion, I would like to thank the Subcommittee for this opportunity. Please be assured that NATE's commitment to safety, education and training in erecting new towers and servicing existing ones will never be compromised. We will do everything we can to help meet the goals of the repack as well as the expansion of broadband. Our bottom line is that we want work to be done properly and efficiently, and that at the end of the day, we want our workers to come home safely. This is good for us, for you, for our nation's economy, competitiveness and homeland security, and for our vital communications capabilities.

**UTILIZING NATE SAFETY PROGRAMS, RESOURCES AND STANDARDS TO
FACILITATE A SAFE AND EFFICIENT REPACK TRANSITION**

NATE offers invaluable safety resources and programs for the wireless and broadcast industries to utilize to help facilitate a safe and efficient repacking transition. Several of NATE's most popular and relevant safety resources for stakeholders in wireless and broadcast to utilize are referenced below:

Broadcast Repack Climber Connection Video

NATE recently released a Broadcast Repack safety video as part of the Association's popular Climber Connection Volume 2 video series. The Broadcast Repack video is designed to educate the communication tower workforce and provides a detailed overview of the unique rules and challenges associated with conducting work on massive broadcast towers. The video also includes practical information on elevator safety tips, climbing taller structures and the additional risks involved with structural modifications on broadcast towers.

To watch the Broadcast Repack safety video, visit the following website link from NATE's YouTube channel: <https://www.youtube.com/watch?v=4mMb1ctyWik&t=4s>. NATE encourages all broadcast and wireless industry stakeholders to actively participate in this campaign by posting the Broadcast Repack video on their respective social networking platforms using the hash tag #ClimberConnection.

STAR Initiative Contractor Companies

The NATE STAR Initiative, currently in its 6th program year, is the Association's signature program designed to help companies operate safely and recognize tower contractors, tower owners and carriers who voluntarily adhere to higher safety standards. The NATE STAR

Initiative emphasizes Safety, Training, Accountability and Reliability by asking participants to commit to requisite levels of training, site safety audits and the implementation of safety programs while adhering to industry best practices. The NATE STAR Initiative participating companies are the industry “gold standard” for safety and quality. The list of NATE STAR Initiative companies for 2017 can be accessed at the following link: <https://natehome.com/safety-education/nate-star-initiative/members/>.

Qualified Contractors Evaluation Checklist

The Qualified Contractors Evaluation Checklist was primarily designed to serve as a resource to help carriers, owners and broadcasters thoroughly vet a contractor’s qualifications and dedication to safety. NATE urges our members to share this resource with their clients, and encourage them to hire only those companies which are qualified to perform work in a safe and quality manner.

The Qualified Contractors Evaluation Checklist can be downloaded at the following link:

<https://natehome.com/wp-content/uploads/2011/03/Qualified-Contractor-Checklist-11-20-14.pdf>.

NATE Tower Climber Fall Protection Training Standard (NATE CTS) 4th Edition

The NATE Tower Climber Fall Protection Training Standard (CTS) 4th edition is available to members and industry stakeholders. NATE is proud to offer the 4th edition of the CTS to better facilitate training and improve safety in the industry. The CTS is the Association’s signature safety resource and provides one more tool in the toolbox to ensure that climber training is consistent regardless of who is conducting the training.

2nd Edition of NATE’s Unmanned Aerial Systems Operations Around Vertical

Communications Infrastructure Document

NATE recently released the **2nd Edition of the NATE Unmanned Aerial Systems Operations Around Vertical Communications Infrastructure** resource document. The 2nd Edition of this

valuable safety resource is a by-product of collaboration between the NATE Unmanned Aerial Systems (UAS) Committee and other prominent representatives from the commercial UAS industry. The intended focus of the document is on UAS operations around wireless infrastructure, cellular towers, broadcast towers and utility structures. The 2nd Edition also incorporates updates from the new guidelines and provisions associated with the Federal Aviation Administration's (FAA) Part 107 for the commercial utilization of UAS technologies.

The 2nd Edition of the *NATE Unmanned Aerial Systems Operations Around Vertical Communications Infrastructure* document is available to the industry as a free resource and accessible to be downloaded on NATE's website at the following link: <https://natehome.com/wp-content/uploads/2016/05/UAS-Operations-Document-2nd-Edition-Jan-2017-E-FILE.pdf>.

ANSI/ASSE 10.48 National Tower Safety Consensus Standard

On January 1, 2017, the American National Standards Institute (ANSI)/American Society of Safety Engineers (ASSE) A10.48-2016 Standard officially became effective. The *A10.48 Standard – Criteria for Safety Practices with the Construction, Demolition, Modification and Maintenance of Communications Structures* is a game changer for the industry as it has the distinction of being the first comprehensive standard encompassing the entire tower construction, service and maintenance industry.

The standard establishes minimum criteria for safe work practices and training for personnel performing work on communication structures, including antenna and antenna supporting structures, broadcast and other similar structures supporting communication-related equipment. The final version of the A10.48 Standard is a by-product of over six years of hard work and diligence by a group of dedicated organizations and subject matter experts. The transformative

A10.48 Standard will also provide the ultimate road map for companies and workers to adhere to in order to raise the bar on safety and quality in the industry.

The A10.48 Standard is available for sale to broadcast industry stakeholders on the NATE website at the following link: <https://natehome.com/regulations-and-standards/standards/ansi-10-48/>.

NATE's Workforce Development Initiatives

NATE is also committed to workforce development as a priority area over the next several years to help alleviate the labor shortage the industry is currently experiencing. The Association's workforce development initiatives can play a role in helping bolster the pool of qualified labor available to work during this all-important broadcast repack transition phase.

Communications tower technicians are the backbone of the wireless and broadcast ecosystem. The work performed by tower technicians at elevated heights on communications structures is of critical importance to homeland security, public safety, national competitiveness, expansion of broadband and our nation's vital communications capabilities.

Specific Workforce Development Initiatives

NATE is currently employing workforce development strategies focused on identifying, recruiting, training and developing the millennial generation and minority groups to work in the communications tower industry.

Education and Recruiting Outreach

(NATE Workforce Development Recruiting Brochure)

- High Schools and Community Colleges
- Minority Organizations
- Military

Training Pathways

- Employer Sponsored Training Program
- Private Training Companies (NATE has over 30 member training companies)
- Community and Technical Colleges
- Apprenticeships

National Wireless Safety Alliance Tower Technician Certification

After workers obtain training to become a tower technician, companies have an opportunity to ensure that their workers obtain National Wireless Safety Alliance (NWSA) certification credentials. NWSA is a 501c-6 assessment and certification organization that provides nationwide, portable worker credentials to tower technicians in order to ensure continued excellence and professionalism in the industry. Workers, regardless of their training pathway, will ultimately be required to take a standardized NWSA knowledge and field-based assessment. The NWSA certification card will be a source of pride for industry workers and will ultimately raise the bar on safety and quality.

Both the Broadcast industry (NAB) and the wireless industry are represented on the NWSA Board of Governors. NATE is committed to ensure that NWSA certified personnel are the workers who will be able to provide quality broadcast repacking work in a safe manner.