Climbing in the Bird-Tower Environment: First Principles
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The NATE Administrative Office headquarters is located in Watertown, South Dakota. Office hours are Monday through Friday, 8:00 a.m. to 5:00 p.m. (Central Time).

NATE Mission Statement

- To pursue, formulate and adhere to uniform standards of safety to ensure the continued well-being of tower personnel.
- To educate the general public, applicable government agencies and clients on continued progress toward safer standards within the industry.
- To keep all members informed of issues relevant to the industry.
- To provide a unified voice for tower erection, service and maintenance companies.
- To facilitate effective safety training for the industry.
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DATEs to REMEMBER

5G North America  
May 6-8 | Denver, CO

OSHA National Safety Stand-Down  
May 6-10

NEWA Educational Series: Wireless Infrastructure Safety  
May 7 | Burlington, MA

NATE Member Fly-In  
May 14-15 | Washington, DC

Canadian CommTech West  
May 15-17 | Calgary, AB

Susan Harwood Grant - Advanced Rigging Principles Course  
May 17 | Glen Allen, VA

Connect (X)  
May 20-23 | Orlando, FL

Drone Focus Conference  
May 29 | Fargo, ND

FAA UAS Symposium 2019  
June 3-5 | Baltimore, MD

ASSP Safety 2019  
June 9-12 | New Orleans, LA

Susan Harwood Grant - Advanced Rigging Principles Course  
June 13 | Kenner, LA

NYSWA Wireless Forum 2019  
June 20-21 | New York, NY

UTC Telecom Conference  
June 17-21 | Fort Worth, TX

TowerXchange Meetup Americas  
July 9-10 | Boca Raton, FL

Susan Harwood Grant - Advanced Rigging Principles Course  
July 15 | Bellevue, WA

COWA Golf Tournament  
July 18 | Littleton, CO

T-Mobile Golf Tournament  
July 24 | Newcastle, WA

2019
IN THIS ISSUE

COVER STORY

Climbing in the Bird-Tower Environment: First Principles

Photo courtesy of Marco Restani, PhD | Cell Tower Osprey Management

FEATURES

In Memoriam
William (Bill) F. Carlson | March 1, 1937 – March 25, 2019

NATE EXCHANGE

Board of Directors Election Procedures | Application

2018-2019 STAR Initiative Participants

National Association of Tower Erectors: Elevating the Industry to a Bright Future

NATE UNITE 2020

NATE in Action

National Safety Stand-Down | May 6-10, 2019

Planning Advisory Notice: Rope and Rigging Compatibility

Working Safely Around Downed Electrical Wires

TowerXchange: Claro Develops the Largest Private Renewable Energy Generation Project in Brazil

IN EVERY ISSUE

Dates to Remember
Chairman’s Corner
Executive Insights
Wireless Industry Network (WIN)
Women of NATE (WON)
OSHA Relations Committee Update
OSHA Watch
Washington Watch
Safety & Education Committee Update
Trade Show Committee Update
Legal
Member Anniversary Recognition
Member Services Committee Update
Safety Poster
Workforce Development Group
Finance
Graduates of Advanced Rigging Principles Course
What To Do in Case of An Accident
NATE Online Marketplace
Tailgate Safety Topic
View from the Top
Advertiser Listing
Classified Ads

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If you are in the process of building or modifying a wireless structure, please consider our tower technicians prior to designing a structure.

The safety and well-being of our workforce should be at the forefront of tower design.

I challenge us all to make a winning business case for a structure that, at the very least, offers the following:

1) **An unobstructed and safe way to get to our work.**

   Workforce development is a challenge for our industry. We need a workforce capable of performing technically challenging tasks while working in places most will not go. While physical abilities are important, workers should not be limited in regard to "where they can go" based on their size or strength. We must all work to ensure that climbing faces remain unobstructed, providing a safe and efficient path to access working areas.

2) **Accessible ladders in place of step bolts.**

   Today, step bolts have a distance between steps that cannot be reached by everyone. Unobstructed climbing ladders with a distance between steps that everyone, regardless of height, can ascend should be the industry standard. The future workforce should not be limited by the length of their arms or legs, and performing pullups to access your work station should not be a requirement. Additionally, given the extensive testing performed on step bolts and the correlating empirical data that will soon be published, a migration path away from them needs to start now.

3) **Easily accessible and engineer approved antenna mounts.**

   If multicarrier structures are built, why not include mounts designed for the loads of today and tomorrow? Mount designs should include rigging information for the mounts that will hold the strain of performing equipment installation and replacement activities. In today's world, we have allowed mounts that will not safely support our workers while performing maintenance activities. Mounts must be spaced to allow adequate rigging attachment points. If anything on the structure is not man-rated, don’t hang it! And last but certainly not least, providing documented rigging points and spacing them to give the prestigious “head room” that makes every job safer for all parties concerned is needed.

I contend that if the philosophy of “Design the Wireless Structure for the Work Force” is applied, a business case can be made by considering the cost of large cranes and the risk management involved. It would certainly be easier to build new wireless structures with this methodology as compared to the modification of existing ones, but it can be done!

So many times in life we come to terms with ourselves. Examples of this are: “We have done it that way for

**Shout Out to Our Wireless Ecosystem!**

This is a monopole I ran across in Ireland and the mounts are catching on with some carriers in the United States. A safe way to get to our work, along with a safe way to perform the work upon arrival can be credited to round mounts that one can climb through.

---

Jimmy Miller is the Chairman of the National Association of Tower Erectors and is President of MillerCo, Inc. in Gulfport, Mississippi. He can be reached at 228-832-3352 or jlmiller@millercoinc.com.
The NATE online poll question is located on the NATE website homepage at www.natehome.com

NATE Online Poll Question

Is your company currently looking to hire tower technicians?

A. Yes, we are actively seeking tower technicians to add to our team.

B. No, we are not currently looking to hire additional tower technicians to our team.

The NATE online poll question is located on the NATE website homepage at www.natehome.com
As all of you are aware by now, the industry lost an icon in late March of this year when NATE Co-Founder Bill Carlson from Tower Systems, Inc. passed away. Since that time, many tributes from across the country have poured in to honor and remember the legacy of Mr. Carlson. And what a legacy it was.

In 1995, Bill demonstrated foresight and leadership in helping bring together an initial group of 60 tower contractors to establish NATE during a meeting in Dallas, Texas. Keep in mind that this was done during an era in the industry when a certain "cowboy" mentality and independent spirit existed.

To get 60 companies in the same room to discuss the industry and develop a consensus path forward to establish an organization was no small feat.

Fast forward to today and the decisions made in that hotel meeting room 24 years ago have transformed an entire industry. NATE now counts over 880 companies amongst its membership and the Association has played a major role in creating a professional, safe and vibrant industry culture with great career pathways to choose from.

In addition to helping establish NATE in 1995, Bill was also at the center of another signature moment in the Association’s history when, in 2014, he was recognized on a national scale for his contributions to the wireless industry. In September of 2014, the Wireless History Foundation inducted Mr. Carlson into the Wireless Hall of Fame during a ceremony in Las Vegas, Nevada. Bill’s 2014 induction was historic in that he became the FIRST tower contractor to be enshrined into the prestigious Wireless Hall of Fame. I remember sitting in the audience during this ceremony and seeing the pride on the faces of all of the NATE representatives in attendance that evening. What a legacy!

Please continue to keep Bill’s wife Ruth Lorraine, daughter Kari, daughter Kelli Anderson, son-in-law Eric Anderson and granddaughters DeLaney and Avreigh in your thoughts and prayers. All of us can continue to honor Bill’s legacy by adhering to the mission of NATE and the virtues of professionalism, respect and kindness in our professional and personal lives.

Todd Schlekeway is the NATE Executive Director. He can be reached at 888-882-5865 (U.S.) or 605-882-5865 or todd@natehome.com.

Elevate Your Future Workforce Brochure

A career in wireless offers enormous opportunities! Advances in wireless are changing the landscape and delivery models for industries as diverse as health care, financial services, higher education, agriculture, energy, aviation, utilities, public safety, government and the military. These advances have led to explosive growth in wireless data consumption.

This explosive growth in conjunction with the massive spike in work activities related to the FirstNet build-out, Broadcast Repack transition and the run-up to next generation 5G networks has led to a labor shortage. The NATE Elevate Your Future workforce brochure was created as a tool for NATE members to identify and recruit the millennial generation to work in the wireless industry. Attracting millennials for a safe and rewarding career in wireless is a top priority in order to meet the intense demand required to build the networks of today and tomorrow.

On the back of each brochure, a section stating “This brochure is provided by:” has been left blank so each individual company can include their company contact information for their respective workforce recruiting efforts.

Purchase of the brochure is available in the following quantities:

- Quantity 50 - $20.00
- Quantity 100 - $40.00
- Quantity 200 - $80.00
- Quantity 500 - $200.00

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In Memory Of

William “Bill” F. Carlson
March 1, 1937 – March 25, 2019

It is with heavy hearts that the Association announces the passing of NATE Co-Founder and Tower Systems, Inc. President & CEO William “Bill” F. Carlson. Bill passed away peacefully at his home on Monday, March 25, 2019. The NATE community extends our thoughts and prayers to Bill's wife Ruth Lorraine Carlson, daughter Kari Carlson, daughter Kelli Anderson, son-in-law Eric Anderson and granddaughters DeLaney and Avreigh.

Bill Carlson’s illustrious career spanned over five decades as a wireless infrastructure trailblazer providing tower construction, service and maintenance in the United States and around the globe. Since 1975, he has owned and operated Tower Systems, Inc. During that time, Bill developed a reputation as a hard-working, straight shooter and attracted customers from all corners of the United States and across the globe, while always maintaining his upper Midwest values of hard work and integrity. Despite his successes, Bill also possessed a gentle, considerate spirit that earned him a reputation of caring for his employees and being generous to many causes.
In 1995, Bill demonstrated foresight and leadership in bringing together an initial group of 60 fiercely-independent tower contractors to establish the National Association of Tower Erectors (NATE), a non-profit association that provides uniform safety standards, education, communications, and serves as a unified voice for the wireless and broadcast infrastructure industries. Although a busy man, he served as a volunteer Board member to the Association for a number of years so that he could see to it that the organization got off to a good start.

One of the many ways Bill's legacy can be measured is in the fact that today, NATE boasts over 870 member companies consisting of tower construction firms, general contractors, tower owners/vertical realtors, wireless carriers, engineering firms, public safety entities, manufacturers, distributors, technology start-ups and training companies.

Bill was also recognized on a national scale for his contributions to the wireless industry. In September of 2014, the Wireless History Foundation inducted Mr. Carlson into the Wireless Hall of Fame during a ceremony in Las Vegas, Nevada. Bill's 2014 induction was historic in that he became the FIRST tower contractor ever to be enshrined into the prestigious Wireless Hall of Fame. Mr. Carlson's honor also represented a significant milestone for NATE and the prominent role the Association plays in the industry.

In 2014, Bill was honored as the initial recipient of the NATE Lifetime Service Award during the NATE UNITE Conference in San Diego, California. This prestigious award, which has been named the Bill Carlson Lifetime Service Award in his honor, is awarded annually to an individual who has made a significant and long-term contribution to the success of the NATE mission and has served the Association continually for a minimum of 15 years.

“Bill was an iconic figure in the tower industry,” stated friend and business associate Craig Snyder, CEO of VIKOR Teleconstruction. “Bill took care of himself and his family but he was also a great uniter of people and very generous with his time and talents. That’s why in 1995 he started the National Association of Tower Erectors. To him it wasn’t enough to build a strong business for himself; he wanted everyone in this industry to benefit. I will miss Bill and his wit and wisdom. He has certainly left a legacy for those of us left behind to follow,” added Snyder.

“Bill was truly a Renaissance man in our industry,” said former NATE Chairman and long-time friend Don Doty of FDH Infrastructure Services, LLC. “After he successfully transitioned from a fledgling business to a successful operation, which took many years, he taught himself how to connect with government to stabilize and enable growth. Next he moved his operation from Minnesota to South Dakota by using tax dollars to his advantage. Bill expanded safety at his company not because of regulations, but because it was good business and his company grew because of his efforts towards safety drew the best and the brightest in the industry. I dare say, we are all better off, more informed, better educated about our industry and how government works with Bill’s influence,” Doty added.

“God Bless Bill and his family for all this man has done.”

“Bill Carlson was a mentor, leader and close friend to so many people in his life,” said business partner and former NATE Chairman Kevin Hayden of Hayden Tower Service, Inc. “He possessed a common-sense perspective and it was always so enjoyable to spend time with him. While successfully managing his own business, Bill had the foresight and vision to start NATE. NATE is a testament of how much Bill cared and gave back to the people around him. During this time of grief, my thoughts and prayers go out to Bill’s family. Bill will be missed by me and so many others,” added Hayden.

A Celebration of Life for Bill Carlson of Northwest Angle, Minnesota was held on Tuesday, April 2nd at 12:00 PM at Helgeson Funeral Home in Roseau, Minnesota. A visitation was held one hour prior to the service with military honors by the Roseau Memorial Honor Guard. A lunch and reception followed at the funeral home with interment at Good Shepherd Cemetery in Angle Inlet.

In lieu of flowers, the family’s preference is memorial donations be made in Bill Carlson’s name sent to the 501(c)(3) non-profit Tower Family Foundation. Individuals and industry stakeholders who wish to make a memorial donation in Bill Carlson’s name to the Tower Family Foundation should visit the following website link (http://towerfamilyfoundation.org/get-involved/donate/). Donors paying by credit card should note “Bill Carlson Memorial” in the Company Field of the credit card form. Donors paying by check should note “Bill Carlson Memorial” in the Note Field of the check.
As we turn the corner away from winter, spring should, and I repeat should, bring warmer weather which will allow tower crews to shift into a higher gear. If we thought it was busy in the first quarter of the year, you haven’t seen anything yet!

Between the broadcast repack, small cells, rural broadband, and expanding basic cell coverage – the demands on our member companies are great.

In conjunction with this, the 6th Annual OSHA 2019 National Stand-Down for Fall Prevention is set for May 6-10. This week is set aside to discuss safety and highlight fall prevention at your construction sites. For more information, you can check out their website: https://www.osha.gov/StopFallsStandDown/index.html.

Safety also means properly trained personnel. Recently, I, along with representatives of member companies Crown Castle, Viking Maintenance dba Finish Tower, Elite Elevations, Murphy Tower Services, LLC, and US Cargo Control, had the honor to meet with Iowa Second District Congressman Dave Loebsack at an active Crown Castle cell site in Le Claire, Iowa. We met because Congressman Loebsack, along with Oklahoma Second District Congressman Markwayne Mullin, reintroduced the Communications Jobs Training Act of 2019. This legislation, if passed, will create grant programs for career and technical schools to train workers for construction, service and maintenance of communication towers. As everyone reading this magazine understands, we have a shortage of qualified workers. Therefore, it is very important to have a workforce properly trained to do this work. Technology moves at the speed of wireless and technicians need to keep up-to-date with all the changes. NATE and NATE WIN urge all of you to contact your congressmen in support of this legislation.

The NATE Susan Harwood Grant Advanced Rigging Principles Courses continue through the summer.

Courses in the near feature will be held in Glen Allen, Virginia on May 17; Kenner, Louisiana on June 13; and Bellevue, Washington on July 15. You can register for these no-cost courses online at www.natehome.com. I personally want to thank our NATE WIN Liaisons and Ambassadors for all their help with the administration of these Harwood events taking place in their respective regions. Your assistance is invaluable towards the success of these courses!

Finally, on behalf of all of our NATE Wireless Industry Network Liaisons and Ambassadors, let me express our deepest sympathies and condolences to the family of William “Bill” F. Carlson who passed away on March 25. Bill was the impetus behind the creation of NATE and leaves a huge legacy in the tower industry. He will be greatly missed.

Scott Krouse is the Director of the NATE Wireless Industry Network (WIN). He can be reached at 574-360-9004 or scott@natehome.com.
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Climbing in the Bird-Tower Environment: First Principles

MARCO RESTANI, PHD
“She’s a hitter,” my climbing partner warned as we ascended the big cliff to band her nestlings. ‘She’ was a very defensive and agitated adult peregrine falcon and we were in Greenland studying their nesting ecology. He was right. With lightning speed she would swoop to within feet of us, occasionally striking our heads and backs.

Climbing high above ground where territorial birds defend their nest and young against intrusion is unsettling at best and dangerous at worst.

Large birds such as ospreys, eagles, and hawks are increasingly using communications towers for nest sites so climbing crews should become familiar with bird behavior to ensure personal safety. Moreover, birds and nests are protected by law and preserving their welfare is synonymous with industry best practices.

Birds build nests in places that afford protection from predators and the elements. Large birds often satisfy these requirements by nesting in a tall tree or high on a cliff. These natural features are absent in many environments – in deserts, across prairies, and along coasts – and artificial structures provide a suitable substitute for nesting. Today, birds commonly nest on buildings, bridges, and utility poles. Birds are also adopting communications towers as more are constructed throughout the country.

The populations of some birds that nest on communications towers are growing, which increases the opportunity for conflict with industry. For example, osprey populations were probably at their lowest levels in the late 1960s and early 1970s but began a steady rebound after DDT was banned in 1972 (Fig. 1). There may be more ospreys now than ever before, and their population trajectory shows scant signs of slowing. Ospreys are relatively tolerant of human activity and readily nest on utility poles, marine navigational buoys, and communications towers. If one bird epitomizes the potential for conflict between tower climbing crews and birds it is the osprey.

Although birds from sparrows to eagles nest on towers, the threats they pose to climbing crews vary by body size and demeanor – yes, different species express a range of aggression. Smaller birds will defend a nest, sometimes vigorously, but their attacks are usually a nuisance rather than a genuine safety concern. The strike of a large bird, however, carries enough force to render a climber injured and disoriented or even unconscious.

Which birds are most dangerous? In general, the bird most hazardous to tower climbing crews across North America is the great horned owl. Adult owls are heavily built, having an average weight over three pounds and a wingspan of four feet. They are known to attack the heads of people approaching nests and stories of them locking their powerful talons onto the backs of climbers are renowned. A biologist friend who studied

CONTINUED ON NEXT PAGE
these owls wore a motorcycle helmet with face shield and a thick leather coat whenever he climbed to nests. I recommend against climbing any tower occupied by nesting great horned owls unless emergency repair of equipment is necessary.

Red-tailed hawks also nest on towers and can be very aggressive, although their behavior is variable across individuals – some adults are aggressive, others are passive. Redtails have also struck climbers on the head and are heavy enough – 2.5 pounds – to inflict blows resulting in serious injury. Climbing to tower nests of this species should also be avoided during the breeding season.

The raptor most likely encountered nesting on communications towers is the osprey. Although ospreys will vocalize and occasionally swoop close to climbers during nest defense, I have never been struck while accessing over 200 nests on power poles the past seven years. Bald eagles, the largest raptor known to nest on towers, are typically shy, and will most often fly around the nest at considerable, non-threatening distances when disturbed. This is fortunate because eagles can weigh over ten pounds and possess palm-sized feet with talons measuring in the inches. However, for both eagles and ospreys, sensible precautions should always be practiced because personalities do differ across individuals.

Respecting the threat birds pose is justified and prudent, yet there are ways to climb safely in the seemingly hostile environment. First, follow all standard safety protocols while ascending the tower. Second, climbers can work together to spot birds that appear agitated and are likely to swoop closely with high aggression. Birds will tend to attack from behind so having one climber move while the other keeps a watchful eye toward the rear is standard procedure for biologists who study large aggressive birds. Finally, climbing slowly rather than quickly gives the adults time to detect danger. This is particularly important during the egg incubation period when a napping adult could inadvertently eject eggs from the nest if startled. Making noise just before the nest is reached will help prevent such mishaps.

In addition to ensuring climber safety, protecting the welfare of nesting birds from disturbance and harm is required by law. Once breeding birds occupy a tower, equipment repair and upgrade schedules may have to be postponed for the entirety of the breeding season, which can span months. Even small birds, for example, have breeding seasons that last a month, whereas breeding seasons of large birds like eagles can stretch six months. If possible, it’s best to schedule tower work outside of breeding seasons but with fast-paced upgrades to new cellular technology, interactions between climbers and birds are inevitable and will likely increase.

The breeding season encompasses activities from courtship and nest building, to egg laying and incubation, to feeding and caring for young until they depart the nest (i.e., fledge). Sensitivity of birds to human disturbance is highest during three periods: 1) egg laying and hatching, 2) when nestlings are small and unable to regulate their own body temperature without being brooded by an adult, and 3) when large nestlings are close to fledging when they think they can fly but can’t. Weather conditions should also be factored into decisions on when to climb towers harboring nests. Eggs and young are most sensitive to very hot or very cold/wet conditions. Strong winds can also blow nestlings near fledging out of nests. Finally, the breeding season can vary by weeks among pairs of adults within a region because of individual differences related to age and length of the pair bond. If all of this sounds nuanced and complicated, it’s because it is.

Consider obtaining advice from an experienced avian biologist prior to climbing a tower occupied by nesting birds. Biologists will be able to identify the species, estimate the stage of breeding, and develop a site-specific plan to protect both climbers and birds. Biologists can also serve as liaisons with federal and state wildlife agencies when permits must be obtained, for example, when nests must be destroyed or when eagles are using the tower. Moreover, biologists should always be consulted to develop strategies when eggs or young are on towers that must be climbed to address emergencies (e.g., loss of 911 service).

The Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act are the primary federal statutes that regulate human activity near bird nests. Each Act can carry significant fines and imprisonment if violated. Individual states may also have laws that protect nesting birds. Pleading ignorance of existing laws is never an ef-
ffective legal strategy so acquiring a basic knowledge of permissible activities is needed to avoid pitfalls. Climbers, contractors, communications providers, and tower owners can all be held liable when violations occur.

Not only are wildlife law enforcement officers keeping watch over nests, so too is the public. Many neighbors are aware of tower nests and some have developed personal attachments to the birds and harbor concern for their welfare.

I once had a very irate neighbor accost me at an osprey nest after I had finished banding and taking blood samples from the nestlings. They skidded to a halt next to my pickup and quickly let it be known that they were armed (no lie, they were) and furious I had disturbed their birds. After a few tense minutes I was able to reassure them that my activities were legally permitted and meant no harm. The point – people are watching – and agitated birds flying around a tower vocalizing to high heaven will draw the public’s attention. Preparing a public relations plan in anticipation of confrontations and sponsoring community outreach to foster goodwill should be standard industry practice in today’s bird-climber environment.

Preventing birds from nesting on towers is a long-term goal supported by both wildlife biologists and industry. Unfortunately, nest excluder devices are currently effective for only ospreys, so keeping all towers nest-free is an ongoing challenge. In the meantime, informing climbing crews about local birds and their behavior is important because it’s good to know before ascending a tower that “she’s a hitter.”

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During the Summer and warmer months, statistics show an increase in injury rates across the board.

As a way to recognize these incidents and prevent them from happening, each year organizations raise awareness and focus on leading causes of work-related incidents and accidents. The National Safety Council (NSC) observes the month of June as National Safety Month. Their approach is to focus on ways to help reduce injury rates by spreading the word, providing training resources, education, and overall safety awareness.

In addition to NSC, the Occupational Safety and Health Administration (OSHA) will be recognizing their sixth annual National Safety Stand-Down to Prevent Falls in Construction the week of May 6-10, 2019. As falls from elevation continue to be a leading cause of fatalities in the construction industry, the National Safety Stand-Down aims to help raise fall hazard awareness in an effort to avert falls and injuries.

Although these are voluntary events, they can provide an opportunity for employers and employees to discuss safety and allow everyone to get involved.

When it comes to participating in Safety Month, there are no wrong ways to go about it. The amount of resources we have available to us are endless. Often times, training is provided via PowerPoint presentation or tailgate talks; however, approaching safety training from a whole different angle can prove to be very successful. Below are a few different types of training ideas that can give employees the opportunity to be interactive and can aid tremendously in the delivery of a successful safety topic.

- Equipment inspections
- Fall protection trivia
- Handouts
- PPE and equipment demonstrations
- Highlighting a different topic each week
- Off the job safety awareness

Safety plays a role in our everyday lives -- during our commute, throughout the work day, at home, and during our free time. Let’s all take the time to make it a priority and focus on the safety of ourselves, our co-workers, our family, and friends. Take that extra minute in your day to help make a difference. Together, we can all raise awareness by training and educating through our resources and personal experiences. We can all help make an impact on safety.

Please take some time to check out the resources:
2. https://stopconstructionfalls.com/

Amy Dolce is a member of the Women of NATE (WON) Committee, NATE WIN State Liaison for New Hampshire and Vermont, and Safety Manager for SAI Group based in Salem, New Hampshire. She can be reached at 508-818-0133 or ADolce@saigrp.com.
Mentorship Program

The WON Mentorship Program is designed to foster an exchange of ideas, expertise and camaraderie among NATE members at all levels. From emerging professionals to industry veterans, participants can grow both professionally and personally by learning from each other’s perspectives, discussing professional issues and supporting their peers in the resolution of their challenges.

This goal-oriented program is designed for participants to speak via phone one to two times a month for a year.

Interested participants are asked to complete and return a short questionnaire to the NATE office.

Once a month, starting in March 2019, all participants will have the opportunity to be part of a separate mentor and mentee opinion call. The goal is to establish continual feedback and improve upon the program. This call will allow participants to discuss changes, updates, successes and questions. We want the program to grow and mature to meet the needs and expectations of members.

To download the questionnaire and for more information visit: https://natehome.com/membership/women-of-nate/won-mentorship-program/

Submit questionnaires to: nate@natehome.com

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The NATE EXCHANGE is a convenient, consumer-driven, “one-stop-shop” platform for tower construction and maintenance companies and individual tower technicians to gain access to the most sophisticated and up-to-date training courses in the tower industry. Additionally, if you are a NATE member company, you will qualify for discounted rates on designated training courses offered on this exchange portal. We encourage you to utilize this website tool to select the courses and training companies that best fit your specific workforce needs.

As a participating company listed on the online portal, your company can promote available course details and information on the EXCHANGE for those looking to train employees. The Association is proud to promote the courses listed on the EXCHANGE as valuable resources and benefits to the industry.

**COURSE CATEGORIES**

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- OSHA 30-Hour
- Equipment/Vehicle Operations
- Unmanned Aerial Systems (UAS)
- Rigging/Signal Person
- First Aid/CPR/AED
- Fall Protection and Rescue
- Technical
- Hazards
- Gin Pole
- Wind
- OSHA 10-Hour
- Hoist
- Electrical
- RF Awareness

[www.natehome.com](http://www.natehome.com)
1. To qualify as a candidate for the NATE Board of Directors, an individual must be an active member in the Association and must be a managing owner of a voting member company or firm, defined as a person who can legally encumber that company or firm.

2. Individuals apply for candidacy by submitting the application form, a brief position/background statement (maximum of one page in length) and a color photograph to the NATE office. Applications are currently being accepted and must be received in the NATE office on or before October 1, 2019 to be considered for candidacy.

3. NATE will publish all candidate information in the September/October 2019 and November/December 2019 issues of Tower Times. Candidates who wish to have their statement of candidacy published in the Tower Times magazine must have their information submitted to the NATE office no later than August 1, 2019, for the September/October issue and October 1, 2019, for the November/December issue. On August 1, 2019, candidate information will be available for online viewing at www.natehome.com.

4. Candidate information will be updated as each Board of Directors Candidate Application is received and eligibility is verified through October 1, 2019.

5. The NATE Board of Directors election will be conducted exclusively online. Online voting will be open November 1 through December 1, 2019. Each Voting Member company will be allowed to submit one ballot. Further detailed information regarding the online voting system procedures and protocol will be mailed to Voting Members in October.

6. Votes must be cast online on or before December 1, 2019.

7. To be elected to the Board of Directors, a candidate must receive a majority of the votes cast.

8. If all available Board positions are not filled on the first ballot, a runoff election will be held to fill the remaining seats on the basis of a plurality of the votes cast.

9. Once all Board positions are filled, the candidates will be advised of the results of the election.

10. Results of the election will be announced once all Board positions are filled, and will be published in the Tower Times.

11. Those elected to the Board of Directors will begin serving their two-year term at the annual meeting in February 2020.

12. The newly elected Board will choose its Executive Officers at the annual meeting.

If you have any questions regarding the Board of Directors election, please contact the NATE office at 888-882-5865 (U.S.) or 605-882-5865 or nate@natehome.com.
To be a candidate for the NATE Board of Directors, the Association’s Bylaws require that, “an individual must be an active member in the Association and must be a managing owner of a voting member company or firm, defined as a person who can legally encumber that company or firm.” Note: To be an eligible candidate, you must be able to answer yes to all six questions.

To declare your interest in running for the Board of Directors, please answer the following questions.

**Candidate Questionnaire**

Candidate’s Name ____________________________________________________________

Company ________________________________________________________________

1. Is your company or firm a voting member of NATE?  □ Yes  □ No
2. Are you an active NATE member?  □ Yes  □ No
3. Are you a managing owner of your company or firm?  □ Yes  □ No
4. Are you active in the current operations of your company?  □ Yes  □ No
5. Do you have the authority to encumber or bind your company in legal transactions, including signing bank notes, signature authority on banking accounts, and the authority to sign tax returns?  □ Yes  □ No
6. In your position with your company or firm, do you have general agency authority to represent the company or firm in all internal and external business transactions?  □ Yes  □ No

**Declaration of Chief Executive Officer or Chief Operating Officer**

I, _______________________, _________________________ of __________________________ hereby confirm (name) (title) (company or firm) that ___________________________ does hold the position and possess the authority as described above. (name of candidate)

_________________________________________________
(Signature of Chief Officer of company or firm)

Please complete this form and send to the NATE office with your candidacy statement and full color photograph.

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For this month’s OSHA Relations article, I’d like to challenge everyone reading to look within themselves. Often times, successful people are asked, “What were the keys to your success?” Many of these individuals set aside time for self-reflection and self-assessment. Challenging themselves by asking, “Where can I be better?” With June being Safety Month for OSHA, I want to encourage NATE members in all roles to drive your safety culture.

Do not rest on the laurels of previous safety and risk management achievements, instead, lead your team’s efforts to continue to improve your safety practices and efficiency of your operations.

Be at the forefront of your team’s efforts to be the most safe and effective operation possible. My father used to tell me, “Don’t tell me what you did for me yesterday, but tell me what you are doing for me today and what you are going to do for me tomorrow.” I know it may sound like a pretty tough statement for a father to tell his son, but the message was received. Do not become complacent dwelling on past success, instead invest your time today to build upon that success and enable future victories.

Now you are probably wondering, “How do I do that with a safety program?” Fair question, but safety and risk management much like the wireless and broadcast industries as a whole are continually evolving with the introduction of new technology and reformed practices put together by NATE and other involved industry partners. Just as the technology you and your teams install has progressed, so has the technology available to support and enhance safety and risk management procedures. Firms now offer daily text message-based safety talks that can be sent to your entire team or key supervisors to share with the remaining employees. Also, there are resources available like Learning Management Systems that will automate your safety training programs and set automatic reminders for when courses are due for your employees. Technologies like the above mentioned programs not only create an efficiency for the communication of the safety program for your operation, but also help your in-house safety director. It helps them be able to focus during their time out in the field or with up and coming employees since they are not having to create dialogue for each safety meeting. These technologies are built to help keep the safety message at the forefront with your team and help avoid lost time and lost revenue opportunities.

While some safety technology is focused on the communication of the safety message, others are focused on tracking and enforcement of good behaviors. One of the largest concerns for insurance professionals with the communication infrastructure industry today revolves around the exposure due to driving and automobiles. Thankfully, there has been a massive growth in the use of telematics and GPS programs to help companies know and understand their team’s driving behaviors. This is a huge investment that I encourage all business-owners to explore as insurance companies love to see the implementation of these programs and it can be used to enforce good driving behaviors for your entire team (sales folks included!).

The final piece that I see as a great way to drive your safety culture, is to invest in superior safety equipment. Through many NATE members, there is an abundance of distributors and manufacturers to work with in order to find a solution for your safety equipment. Invest in your team and give them the best. Frequently, when evaluating the cost of equipment investment, leaders forget to calculate one key factor- the pride of their team members when they are given the best. Providing your team with the best in safety equipment will not only keep them safe, but also keep your team members around longer, helping turnover stay low. Lowering turnover is crucial to creating more cohesive teams that can work more efficiently and more effectively.

Ross Evans is a member of the OSHA Relations Committee and Branch Manager and Partner with Insurance Office of America (IOA) in Gainesville, Georgia. Ross can be reached at 770-250-0153 or ross.evans@ioausa.com.
As you and your team focus on safety in the future, I encourage everyone to use the resources available to you whether that be your broker, NATE partners, or local community groups. These parties will have a multitude of resources to help you and your operation succeed, so don’t be shy about reaching out for assistance. As we observe safety month this year, work to drive your safety culture because not only will it keep your team safe; but it will improve the efficiency of your operations by avoiding incidents and their associated costs, enabling your team to focus on revenue-producing activities.

As always, stay safe out there.

Featured Video: Trenching Soil Classification

Classifying soil is one of the steps that employers must follow to ensure that trenching work can be done safely. OSHA requires that employers have a competent person to determine the soil type and likelihood of a cave-in. This determines how to properly slope, bench, or shore the trench to prevent a collapse. OSHA’s soil classification video demonstrates how a visual inspection of a construction site’s soil is performed. It also shows the three most common methods for testing soil stability: plasticity, thumb penetration, and pocket penetrometer. To view the video, go to https://www.osha.gov/dts/vtools/construction/soil_testing_fnl_eng_web.html.

OSHA Requests Information on Powered Industrial Truck Standard

OSHA is requesting information as the agency considers rulemaking to update the powered industrial trucks standards. OSHA will use the information received to determine what action, if any, it may take to reduce regulatory burdens and create jobs while improving worker safety. Powered industrial trucks include forklifts, fork trucks, tractors, platform lift trucks, motorized hand trucks, and specialized industrial trucks powered by an electrical motor or internal combustion engines. Comments must be submitted by June 9. For details, see the news release at https://www.osha.gov/news/newsreleases/trade/03082019.

Featured Video: Carbon Monoxide Exposure from Portable Gas-Powered Equipment

Every year, workers die from carbon monoxide poisoning, usually while using fuel-burning equipment, tools, compressors and pumps, gas-powered forklifts, and other devices in buildings or semi-enclosed spaces without adequate ventilation. OSHA’s videos on carbon monoxide in construction (in English and Spanish) use computer generated reenactments of actual incidents to demonstrate how to protect workers lives. To view the video, go to https://www.osha.gov/dts/vtools/construction/carbonmonoxide_fnl_eng_web.html.

For more information: www.osha.gov
It has been incredibly busy since the NATE annual conference in Grapevine, Texas.

As I’m writing this, preparations are accelerating for the first-ever NATE Fly-In to Washington, D.C.; we are expecting over 50 NATE members to travel to the nation’s capital in mid-May for meetings on Capitol Hill, where several key topics will be discussed.

First, of course, is the local angle; we will be scheduling meetings with Members of Congress (and staffs) who represent the people flying in, who will talk about their companies and the work they perform. This is the “all politics is local” priority about which I write and speak so often – congressional offices must understand that NATE members coming in for official visits are employers and employees, are good for the local economy, and are potential voters (and contributors).

Our attendees are also likely to reiterate our abiding belief that OSHA should not proceed with developing new regulations on tower climber safety and fall protection. Instead, the agency should embrace and implement the industry national consensus standards that, as you all know, were years in the making by subject matter experts. Doing so would demonstrate OSHA’s commitment to partnering with a regulated industry, and would substantially and significantly promote safety now (and save lives and money) instead of waiting for questionable regulations later.

Fly-In participants are also expected to discuss workforce shortage and workforce development. And speaking of workforce development: one of the key subjects for fly-in participants will undoubtedly be something that is current at this very moment, and will assuredly still be a top priority in the weeks and months to come.

As Todd and I have frequently written, we have been closely collaborating with Representatives Dave Loebsack (D-Iowa) and Markwayne Mullin (R-Okla.) on their bipartisan “Communications Jobs Training Act.” The bill, which was first introduced last year, was formally reintroduced in mid-March following a tower site visit by Loebsack to a Crown Castle facility in Le Claire, Iowa, which is in Loebsack’s 2nd Congressional District. Todd and I worked extensively with Loebsack’s staff in coordinating this event, together with NATE WIN Director Scott Krouse, NATE WIN Liaison for Iowa Pete Hagstrom of Viking Maintenance dba Finish Tower, Jeff Lyon of Elite Elevations (a NATE member company located in the district – one of 12 NATE member companies located in Iowa), and representatives from Crown Castle (Andrea Bradford, Richard Cullum, Kenneth Hill, and Siely Joshi).

As you may recall, the bill proposes funding for job training to enhance communications tower service through a grant program to community colleges, post-secondary vocational and technical schools, and any organization that provides career and technical education to veterans to establish or expand job training programs for communications tower service, construction, and maintenance. We assisted Loebsack’s staff in revising the legislation, and helped to identify Mullin as a possible cosponsor to make the initiative bipartisan; we are currently working to similarly identify possible sponsors of companion legislation in the Senate.

Upon reintroducing the bill in March, Loebsack said, “I am pleased to partner with Congressman Mullin and NATE to champion the Communications Jobs Training Act.”

Mullin added, “The need to continually expand broadband internet across our country is greater than ever. As that demand increases, we must also have a skilled workforce in place to meet those infrastructure needs.”

Jim Goldwater is a Senior Vice President at Bob Lawrence & Associates, Inc., and also serves as NATE Director of Legislative and Regulatory Affairs. He can be contacted at 703-924-6042 or jimauh2o@aol.com.
NATE Chairman Jimmy Miller said, “We are extremely proud of our collaboration with Congressmen Loebsack and Mullin on this important legislation, which will provide key assistance in educating and training tower workers so critical to meeting our nation’s demand for greater and greater communications services. NATE commends the congressmen for their leadership and commitment.”

Loebsack, who is a senior member of the House Energy and Commerce Subcommittee on Communications and Technology (which has jurisdiction over the legislation, along with the House Education and the Workforce Committee), has stated that the bill is a top priority for him during the 116th Congress.

In addition to addressing workforce and training matters, the bill and other measures which Loebsack’s subcommittee are expected to pursue will enhance safety in the communications tower industry. Unquestionably, more workers coupled with expansion of communications infrastructure and services will facilitate tower work, complement advances toward 5G, and support FirstNet – all among our highest priorities.

Practicing safety may get old, but so do those who practice it.

- Author Unknown -
The NATE STAR Initiative is designed to help companies operate safely and recognize tower contractors, owners and carriers who voluntarily adhere to higher safety standards. The NATE STAR Initiative emphasizes Safety, Training, Accountability and Reliability by requiring participants to commit to requisite levels of training, site safety audits and the implementation of safety programs while adhering to industry best practices. STAR Initiative participants also receive discounts on designated training courses offered on the NATE EXCHANGE, a dynamic website platform connecting companies to the most up-to-date training courses offered in the tower industry.

2018-2019 NATE STAR Initiative Participants Include:

A&J Steel Reinforcing Services Inc.  
Above All Tower Climbing, LLC  
Advanced Tower Services, Inc.  
Advanced Wireless Solutions, Inc.  
Amatel, Inc.  
AmChel Communications, Inc.  
Atlantic CommTech Corporation  
Atlantic Construction Companies  
B+T Group  
B-C Walker, Inc.  
Best Endeavours, Inc.  
Black & Veatch  
Branch Communications, LLC  
Bright Lighting, Inc.  
Capstone Solutions Inc  
Centerline Communications LLC  
Centerline Solutions, LLC  
Cipov Enterprises, Inc.  
Clifton’s Tower Service, Inc.  
Com Plus Inc.  
Commitee Corp.  
Communication Network Solutions, LLC  
D & H Builders, Inc.  
DAWCOM  
Design 1  
Design Telecommunications Inc.  
Dietz Brothers, Inc.  
Diversified Communications Services  
E.M. Enterprises General Contractors, Inc.  
East Coast Communications  
Eastern Communications, Inc.  
EasTex Tower, LLC  
Elevated Services, LLC  
Eleco, Inc.  
Emergency Radio Service, Inc.  
Engineering Wireless Services, LLC (EWS)  
ERI Installations, Inc.  
Ericson Inc.  
Excalibur Builders and Maintenance, Inc.  
Excel Construction, Inc.  
FDH Infrastructure Services, LLC  
Flash Technology  
Global Tank and Tower, LLC  
Grapevine Solutions, Inc.  
Gray’s Tower Service LLC  
Great Plains Towers  
Green Mountain Communications, Inc.  
Gulf Services  
Hayden Tower Service, Inc.  
Heartland Solutions Corp.  
Hightower Communications, Inc.  
Independent Network Services, LLC  
Industrial Communications, LLC  
JT Tower Service  
KGPco.  
KMM  
Lee Antenna & Line Service, Inc.  
Legacy Telecommunications, LLC  
Long Wave Inc.  
Mangum Civil Constructors, Inc.  
MarTec Network Solutions  
McPhee Electric  
MDTS LLC  
Mercury Communication & Construction INC  
Meridian Blue Construction, LLC  
Mesquite Valley Communications, Inc.  
Michigan Towers Incorporated  
Microwave Transmission Systems, Inc.  
Mid Atlantic Contracting, Inc.  
Midland Communications Inc.  
Midwest Tower Erection, Inc.  
MILLENNIA CONTRACTING, INC.  
MillerCo, Inc.  
Murphy Tower Services, LLC  
MUTI - Sabre Industries Telecom Services  
Nav Industrial Inc.  
NDC Communications, LLC  
Needmore Towers Inc.  
Network Installation Specialists, LLC  
Newkirk Electric Associates Inc  
Noash Construction, Inc.  
North Sky Communications, Inc.  
Northeast Towers, Inc.  
Northern Pride Communications, Inc.  
Omega Development Company  
Pathwave Inc.  
Patriot Towers Inc.  
Penn-Tech International, Inc.  
Perfect Wireless, Inc.  
Pilgrim Communications, Inc.  
Pioneer Telephone Cooperative, Inc.  
Platinum Communications  
Power of Design Group, LLC  
Primorius Aevenia, Inc.  
Professional Teleconcepts, LLC  
Pyramid Network Services  
R & M Electrical Telecom/Maint., Inc.  
Radiofrequency Safety International (RSI)  
RIO Steel & Tower, Ltd.  
Sabre Industries, Inc.  
SAC Wireless LLC  
SAI Group  
Show Me Welding  
Site Resources, LLC  
SiteMaster, Inc.  
Sky Climber Tower Solutions D&A Sky Climber Telecom  
Skylinx Communications  
SL Universal Contractors LLC  
Spectrum Construction Services, Inc.  
Speelman Electric, Inc.  
STG Communication Services  
Stout & Company, LLC  
Structural Tower Services, Inc.  
STS Communications, Inc.  
Synergy Concepts, Inc.  
T Steele Construction Inc.  
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Tower Communications Expert, LLC  
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Tower Systems, Inc.  
Tower Technologies, LLC  
TowerMRL, Inc.  
Triangle Communication System  
US Tower Services, Inc.  
Vertical Limit, LLC  
Vertical Technology Solutions, Inc  
VERTICOM  
Viking Maintenance dba Finish Tower, Inc.  
Wireless Construction, Inc.  
Wireless Horizon  
Wireless Infrastructure Services

If you have any questions, please contact Sandy Jurgens, NATE Project Assistant at sandy@natehome.com or 605-882-5865 or 888-882-5865 (U.S.).
The VERTEX VENT HI-VIZ helmet is designed with six-point textile suspension, CENTERFIT, and FLIP&FIT systems for all day comfort. Integrable with Petzl headlamps, visors, and multiple accessories, it is an entirely modular helmet. Available in ANSI or CSA compliant versions with personalized versions available on demand.

www.petzl.com
For 24 years, the National Association of Tower Erectors (NATE) has been the undisputed global leader in safety, quality, standards and education for the communications tower industry.

Advances in wireless are changing the landscape and delivery models for industries as diverse as health care, financial services, higher education, agriculture, sports, entertainment, energy, aviation, utilities, public safety, government and the military. This explosive growth in conjunction with industry access to more spectrum and the massive spike in work activities related to the FirstNet build-out, broadcast repack transition, rural broadband deployments and the run-up to next generation 5G networks have led to robust wireless data consumption.

Given NATE’s prominent role and tremendous responsibility, it is important to review all of the recent initiatives and projects the Association has provided leadership on that are serving the needs of our member companies and positively impacting the marketplace.

NATE Leaders Enshrined in Wireless Hall of Fame

The Wireless History Foundation’s Wireless Hall of Fame program recognizes outstanding achievement across all disciplines of the wireless industry. In 2018, the Association’s Former Chairwoman Pat Cipov became the second NATE member tower contractor company executive to be enshrined into the exclusive Wireless Hall of Fame fraternity, following in the footsteps of Bill Carlson’s 2014 induction honor.

NATE Wireless Industry Network (WIN)

Wireless Industry Network (WIN) is a coast-to-coast grassroots program designed to promote NATE’s regional, state and local efforts, support existing state and national wireless organizations and facilitate communication between all stakeholders in the wireless industry.

WIN consists of a nationwide network of respected Regional Ambassadors and State Liaisons who are devoted to NATE’s mission and are passionate about expanding the Association’s message of safety, quality, standards and education in order to reach the entire industry. WIN encompasses eight regions within the United States: Pacific, Southwest, Rocky Mountain, Great Plains, Great Lakes, Northeast, Atlantic Coast and

NATE Mission Statement

- To pursue, formulate and adhere to uniform standards of safety to ensure the continued well-being of tower personnel.
- To educate the general public, applicable government agencies and clients on continued progress toward safer standards within the industry.
- To keep all members informed of issues relevant to the industry.
- To provide a unified voice for tower erection, service and maintenance companies.
- To facilitate effective safety training for the industry.
Southeast and also includes a grassroots structure in Canada as well as a presence in the Bahamas.

WIN also offers an established Speakers Bureau consisting of experienced industry executives who are available on a nationwide basis to deliver keynote addresses, speeches and educational sessions at conferences and events. The exclusive WIN Speakers Bureau lineup includes representatives with expertise in a diverse array of industry topics. Additionally, WIN maintains the most comprehensive calendar of events listing in the wireless industry.

The establishment of the WIN program allows NATE the reach that is needed to meet the needs of the entire mobile landscape. WIN expands the Association’s influence by facilitating the coordinated deployment of NATE’s members and resources to engage individuals at the regional, state and local levels. To get involved with WIN, visit www.natewin.org today.

Women of NATE (WON)

The Mission of the Women of NATE (WON) program is to foster an exchange of ideas, expertise, and camaraderie among NATE members at all levels. WON enables all members of NATE to achieve their full potential and contribute to the future development of NATE and the industry NATE serves.

The WON Mentorship Program was unveiled as the group’s signature initiative. This mentorship program is designed for both emerging professionals and industry veterans alike, affording participants opportunities to grow both professionally and personally by learning from each other’s perspectives, discussing professional issues and supporting their peers in the resolution of their challenges. This goal-oriented program is structured for participants to speak via phone one to two times a month for a year. During these calls, mentors and mentees will set and work through goals.

The WON program also received additional notoriety in 2018 when a delegation of leaders met with FCC Commissioner Brendan Carr and Policy Advisor Evan Swarztrauber at the FCC Headquarters in Washington, D.C. to exchange views on key industry topics. During the visit, WON Chairwoman Andy Lee and WON Committee Member Miranda Allen participated in an FCC Podcast interview to discuss the program.

NATE Workforce Development Initiatives

One of the significant challenges facing the wireless and broadcast infrastructure industries is the shortage of a properly trained and qualified workforce that is expected to possess the diverse skill set necessary to produce the expansion of universal broadband, public safety and ubiquitous 5G coverage across North America, while repacking the broadcast spectrum.

NATE has been leading on the front lines of this battle and workforce development has emerged as a top priority for the Association. NATE’s leadership has committed to investing in workforce development initiatives in order to promote the professional career path opportunities available in our thriving industry.

NATE Workforce Development Group

The Association’s commitment in this arena is reflected by the recent establishment of the NATE Workforce Development Group. The mission of this group is to create awareness and provide information of the many career opportunities in the telecommunications industry to individuals. Through partnerships, the NATE Workforce Development Group will enable and facilitate educational opportunities to individuals who are seeking a new vocation/occupation.

Promoting the Profession through Strategic Third Party Outreach

The last several years, NATE officials have conducted workforce development meetings and forged relationships with representatives from third party, national advocacy organizations including the Association of American Community Colleges (AACC), Association for Career and Technical Education (ACTE), Capitol Tech University, National Black Church Initiative (NBCI), League of United Latin American Citizens (LULAC), National Urban League, National Association of the Advancement of Colored People (NAACP) and Multicultural Media, Telecom and Internet Council (MMTC). During the meetings, NATE focused on educating these organizations on the career opportunities available in the wireless and broadcast industries to help promote the profession and recruit a pipeline of workers into the industry.

NATE is also supportive of industry initiatives aimed at the recruiting, training and hiring of men and women with military backgrounds for jobs in the communications tower industry as member companies and organizations are playing a leading role to train military veterans with the diverse skill sets required to work in the industry.

NATE Facilitates Training to Develop and Grow the Industry’s Workforce

A major component of workforce development is the abundance of training available in the industry to develop and grow a skilled workforce. NATE facilitates high quality training by providing best practices guidelines, standards and subject-matter expertise to...

continued on next page
ensure that minimum benchmarks are established in training curriculum. Some of the training pathways and programs available to industry workers include:

- Employer Training Programs
- Private Training Companies
- Apprenticeship Programs
- Community Colleges
- U.S. DOL-OSHA Susan Harwood Grant Worker Training Courses

**Attracting Millennials to a Rewarding Career in Wireless**

A career in wireless offers enormous opportunities and NATE is aiming its marketing efforts to specifically target the millennial demographic. Communications tower technicians are the backbone of the wireless ecosystem. The work performed by tower technicians is of critical importance to homeland security, public safety, national competitiveness, expansion of broadband and our nation’s vital communications capabilities.

In order to promote the profession as a career path and highlight these tremendous opportunities, NATE has developed a workforce development brochure to assist the Association’s member companies with their own recruiting and hiring efforts. The “Elevate Your Future” workforce brochure is available in both English and Spanish for NATE members through the Member Login section of the NATE website print copies are also available for purchase through the NATE website or by contacting the NATE office.

**STAR Initiative**

The NATE STAR Initiative, currently in its eighth 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.

Participating companies can utilize the STAR Initiative App designed to enhance their program experience and provide a convenient means of submitting Site Safety Audit documentation in real time directly from the field via smart phone, tablet computer or other mobile devices. The official NATE STAR Initiative App is available as a free download in both iOS (Apple) and Android platforms.

Here is a collection of data from the 2017-2018 STAR Initiative Site Safety Audits:

<table>
<thead>
<tr>
<th>2017 – 2018 STAR Initiative Program Data</th>
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<tbody>
<tr>
<td>Number of Participating Companies</td>
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<td>Number of Site Safety Audits</td>
</tr>
<tr>
<td>Number of Hazards Identified and Corrected</td>
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<table>
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<tr>
<th>96.4% Companies Reported:</th>
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<tr>
<td>Number of Employees Impacted</td>
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<td>Number of Employees Trained to the OSHA 10-Hr.</td>
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<td>Number of Employees Trained to the OSHA 30-Hr.</td>
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<td>Number of Employees Trained to the OSHA 500</td>
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<td>Number of Training Hours Provided to Employees</td>
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<th>2017 – 2018 STAR Initiative Site Safety Audit Areas of Deficiencies</th>
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<td>Areas of Deficiencies</td>
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<td>Job Site Documentation</td>
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<td>Personnel Lifting</td>
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CONTINUED ON PAGE 32
As the lines separating telephone, Internet and television companies continue to blur, **ISE is the resource** these providers trust to educate their network evolution professionals.

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U.S. Department of Labor – OSHA Susan Harwood Training Grant Program

For the fourth consecutive year, NATE was selected by the U.S. Department of Labor - OSHA to receive a Susan Harwood Targeted Topic Training Grant for the 2018-2019 program year (SH-05018-SH8). The Susan Harwood Training Grant Program awards grants to nonprofit organizations on a competitive basis. Awards are issued annually based on Congressional appropriation.

The Association received a $150,000 grant and has developed an industry-specific Advanced Rigging Principles Training Course that is being offered throughout the country in 2019. The Advanced Rigging Principles Training Course curriculum is tailored specifically to the communication tower industry and includes detailed instruction on advanced industry rigging principles workers need to know such as synthetic rope, rope inspection, rigging plans, rigging safety factors, lift systems, forces, equipment components, rigging classifications and qualified rigger responsibilities per the ANSI/ASSP 10.48 Standard. Additionally, the training will include information regarding employee and employer rights and responsibilities under the OSH Act of 1970, whistleblower complaint procedures and protection provisions.

As a result of receiving the Harwood grant, NATE is driving a culture of safety and quality by hosting 12 Advanced Rigging Principles Training Courses throughout the country in 2019.

Climber Connection Campaign – Volume 4

NATE is excited to follow-up the first three volumes of our popular Climber Connection video and social media campaign by unveiling Volume 4 of the video series throughout 2019. In early February of 2019, NATE unveiled a Tower Family Foundation video as the first to debut in Volume 4 of the series. The heart-warming video, entitled “Tower Family Foundation: A Helping Hand” focused on the incredible impact the foundation plays in providing financial resources and scholarships to industry workers and families in the aftermath of a work-related accident or fatality. These videos will continue to be a great resource and the industry is going to love what NATE has in store for Volume 4.

NATE encourages tower technicians and all wireless industry stakeholders to actively participate in Volume 4 of the series by posting the videos on their respective social media networks and platforms using the hashtag #ClimberConnection. The Climber Connection Volume 4 campaign was developed by the NATE Member Services Committee in conjunction with the NATE Safety & Education Committee and is designed to provide specific resources and communicate the Association’s message directly to the industry’s workforce.

Unmanned Aerial Systems (UAS)

As a proud member of the Commercial Drone Alliance, NATE continues to exhibit strong leadership in advocating for the safe and efficient commercial operations of drones in the communications tower industry.

In the summer of 2018, NATE hosted a successful inaugural Unmanned Aerial Systems (UAS) Summit in the Motor City of Detroit, Michigan. The high-level, 2-day strategic planning event was attended by participants representing the most prominent companies in the wireless and drone industries.

During the NATE UAS Summit, attendees received an update from the Federal Aviation Administration’s (FAA) UAS Integration Office. Stakeholders also listened to presentations highlighting the evolving nature of drone utilization from a wireless carrier, vertical realtor, contractor and tower technician perspective.

NATE hosted the UAS Summit in order to help scale UAS operations in the industry and take advantage of the many benefits associated with this technology. At the event, the following working groups were established in order to foster collaboration between participants and continue building on the momentum that was established:

- Wireless Carriers and Vertical Realtors Working Group
- Standards and Resource Development Working Group
- FAA Advocacy Working Group

In the fall of 2018, key stakeholders from federal government agencies, industry and media participated in the inaugural NATE Unmanned Aerial Systems (UAS) Operations “Field Day Showcase.” This dynamic drone experience was held at a Crown Castle tower site located in Gainesville, Virginia, in close proximity to the Washington, D.C. beltway.

At the event, attendees were provided an opportunity to witness live flight demonstrations conducted by prominent companies ETAK Systems, LLC, Talon Aerolytics, Inc., Ehresmann Engineering, Inc. and B+T Group. The many applications and use cases
for drones from the perspectives of wireless carriers, vertical realtors, contractors and technicians were on display in real-time directly from the tower-site. At the event, attendees were also provided with a unique opportunity to visit with drone and aviation subject matter experts, on hand, about the transformative impact this technology is having on the wireless industry.

The timing of this UAS Showcase event could not have been better as it was held in the immediate aftermath of the passing of the FAA Reauthorization Act of 2018 legislation. The showcase provided influential stakeholders, from both the public and private sectors, the platform to witness first-hand the power of the drone and facilitate discussions that will ultimately help get commercial UAS operations to scale in our diverse industry.

The 2nd Edition of the NATE Unmanned Aerial Systems Operations Around Vertical Communications Infrastructure document remains available to the industry as a free resource and is accessible for download on NATE’s website. The Association has also produced a Climber Connection UAS Operations video that can be viewed on NATE’s YouTube channel.

Small Cell and DAS Deployment

NATE has developed resource documents related to small cell and DAS deployment activities. The Association released a Small Cell/ODAS Job Safety Analysis (JSA) form and a Venue Job Safety Analysis (JSA) form that is intended to help guide industry workers to perform this work safely and efficiently.

The documents were created by NATE’s Small Cell and DAS Deployment Committee which was established to develop resources and provide guidance to the Association on network densification and related work activities.

The industry is evolving at a rapid pace and small cell and DAS technology plays a vital role in terms of densifying networks and enhancing connectivity. Through resource development and consultation, members of the Small Cell and DAS Deployment Committee are committed to ensuring that this work is conducted in a quality manner. The Small Cell/ODAS JSA form and the Venue JSA form can be accessed on the NATE website.

Legislative and Regulatory Policy

Through NATE’s legislative and regulatory efforts, the Association continues to work diligently with officials from U.S. DOL - OSHA, U.S. SBA, FCC, U.S. DOT, FAA, NTIA, FirstNet, members of Congress, Congressional Committee staff, and other federal and state government entities in order to advance our mission of safety, standards and education in the policy and regulatory arenas.

2018 was NATE’s most intense year to date working in the legislative and regulatory arena. The Association worked diligently in Washington, D.C. to enhance our influence and address policy issues involving tower climber safety; unmanned aerial systems; streamlining wireless infrastructure deployment; expansion of broadband, including in rural areas; workforce development and access to spectrum.

Of particular note, NATE’s Legislative & Regulatory Committee strengthened the Association’s relationships at the Federal Communications Commission (FCC) and conducted personal meetings with four FCC Commissioners. These meetings led to NATE facilitating tower climbing experiences for both FCC Chairman Ajit Pai and FCC Commissioner Brendan Carr.

Another significant development was NATE’s role in the formal introduction of the Communications Jobs Training Act legislation that would provide funding to train communications tower and wireless workers at community colleges and technical schools. NATE has strongly endorsed the bill, and spearheaded a letter of support from a coalition of influential industry organizations.

As a demonstration of NATE’s enhanced influence with policymakers, the Association hosted the inaugural NATE Member Congressional Fly-In Event in Washington, D.C. on May 14-15, 2019. The NATE Member Congressional Fly-In event provided a forum for NATE members and WIN leaders across the country to converge in Washington, D.C. to conduct meetings with the congressional delegations and staff representing all of their respective states. NATE assisted all participating members with lining up their meetings with their designated state congressional delegations and staff. Additionally, all participating NATE members received an official copy of the NATE branded 116th Congressional Directory as part of their involvement in this grassroots event.

CONTINUED ON NEXT PAGE
In recent years, NATE made history when then Chairman Jim Tracy provided witness testimony as a panelist at the U.S. House Energy and Commerce Committee’s Subcommittee on Communications and Technology hearing “The Broadcast Incentive Auction: Update on Repacking Opportunities and Challenges.” Tracy’s appearance marked the first time a NATE representative has been invited to provide testimony at a Congressional Committee Hearing. NATE anticipates more of these opportunities to become available in the future due to the Association’s enhanced influence in the Nation’s Capital.

U.S. DOT - Federal Motor Carrier Safety Administration Interpretation

NATE worked with the U.S. Department of Transportation’s Federal Motor Carrier Safety Administration (FMCSA) to address an issue involving the inconsistent and inequitable enforcement at the state level regarding hours of service and logbook provisions. The issue stems from feedback received from NATE member companies being improperly cited for violating the hours of service and logbook requirements related to their commercial vehicles. Under federal rules, commercial vehicles classified as utility service vehicles are exempt from hours of service and logbook requirements. Accordingly, in the Association’s discussions with FMCSA officials and congressional staff, NATE strongly asserted that its members’ commercial vehicles involved in utility work – such as repairing, maintaining or operating any structures or physical facilities that deliver wireless services – should similarly be exempt.

The Association requested, and subsequently received, a national interpretation letter from the U.S. DOT – FMCSA confirming our understanding of the definition of utility service vehicle as outlined in 49 C.F.R. §395.2 to include those commercial motor vehicles engaged in repairing, maintaining structures or other physical facilities that deliver wireless services – should similarly be exempt.

According to the U.S. DOT – FMCSA interpretation letter, the definition of a USV in §395.2 reads in part:

“Utility service vehicle means any commercial motor vehicle:

(1) Used in the furtherance of repairing, maintaining, or operating any structures or any physical facilities necessary for the delivery of public utility services, including the furnishing of electric, gas, water, sanitary sewer, telephone, and television cable or community antenna service;

(2) While engaged in any activity necessarily related to the ultimate delivery of such public utility service to consumers, including travel or movement to, from, upon, or between activity sites (including occasional travel or movement outside the service area necessitated by utility emergency as determined by the utility provider); …” [Emphasis added].

The U.S. DOT – FMCSA interpretation goes on to state the following:

We consider broadband internet and wireless services to be public utilities as they are provided ultimately to consumers and are comparable to the “telephone, and television cable or community antenna service” stated in the regulation above. They are transmitted to consumers over the same types of cables as television and telephone services. At the time the §395.2 definition was written, broadband internet services were not in common use.

NATE mailed an official copy of the letter to all of its contractor and construction members and encouraged these companies to place copies of the interpretation letter in the glove compartments of all their commercial motor vehicles. NATE members have been instructed to utilize the letter as documentation that their firm’s scope of work is classified as a utility service by U.S. DOT – FMCSA. As such, these companies would therefore be exempt from hours of service regulations and logbook requirements and not subject to citations when their commercial vehicles are involved in utility service work.

This interpretation clarification helps resolve one of the most pressing regulatory burdens our members have been confronted with for many years. NATE listened and proactively responded to the complaints and needs of our membership by vigorously addressing this issue at the federal level and obtaining important regulatory relief for our members.

Tower Technician Appreciation Day Commemoration

NATE unveiled a commemoration declaring Wednesday, May 9, 2018 as Tower Technician Appreciation Day. For the second consecutive year, a day was set aside by NATE to coincide with OSHA’s National Safety Stand-Down Week in order to pay tribute to the important work that tower technicians conduct on a daily basis to enable a mobile society.

CONTINUED ON PAGE 36
New!

WaveMon 40 GHz
RF Personal Monitor

When you are working in a tower, you need to trust your personal monitor.

For that reason, for greater accuracy, the WaveMon has a response which is specifically shaped to FCC limits*.

It has a datalogger with GPS and altimeter, to be able to exactly identify exposure levels and sites. Because your safety is our main goal, we are very proud to provide you with the most complete RF personal monitor in the market.

5% off when mentioning the code**: WVM840NE

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** Additional restrictions may apply. The promotion is not accumulative and/or combined with any other promotion. Benefit valid just in USA and until July 15, 2019.
NATE was ecstatic to declare Wednesday, May 9, 2018 as a day to honor our industry’s most precious resource, the tower technician workforce. Today’s skilled technicians are expected to possess the diverse skill set necessary to safely deploy and expand universal broadband, public safety communications and ubiquitous 5G coverage across North America, while repacking the broadcast spectrum. NATE is proud to highlight and salute these dedicated technicians who work tirelessly to meet both our present and future communication needs.

NATE encouraged member companies and industry stakeholders to use this day of commemoration to host events within their respective organizations to pay tribute to the technicians they employ. The official Tower Technician Appreciation Day Proclamation is available to download on NATE’s website.

Industry Events and Conferences

NATE continues to enhance our presence at industry events in order to aggressively promote our mission of safety, standards and education. Each year, NATE representatives are sought-after speakers at events located throughout the United States. Through involvement at conferences such as AGL, APCO, ASSP Safety, CCA, Commercial UAV Expo, Drone Focus, EHSCP Symposium, GSMA Mobile World Congress Americas, InterDrone, ISE Expo, IWCE, NAB, South Wireless Summit, STAC, UTC Telecom & Technology, WIA Connectivity Expo, Wireless West Conference, and other State Wireless Association Program (SWAP) sponsored events, NATE meets with professionals from across the wireless infrastructure ecosystem. NATE representatives promote the Association through their participation in speaking engagements, panel sessions, networking socials and exhibition displays. This outreach allows NATE to continue to connect with current members, prospective members, government officials and the public in order to educate them on the strides being made towards enhancing safety and quality.

NATE WIN Regional Conferences

The Association continues to supplement its annual NATE UNITE conference by hosting Wireless Industry Network (WIN) Regional Conferences in designated markets to prioritize outreach to stakeholders at the regional and local levels. These WIN Regional Conferences were a tremendous success due to the number of engaged stakeholders in attendance and the informative sessions that were offered at the events. The WIN program is currently making plans to offer future regional events in additional markets to continue to expand our message and influence at the grassroots level.

ANSI/ASSP 10.48 National Tower Safety Consensus Standard

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 game-changing 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 also provides the ultimate road map for companies and workers to adhere to in order to raise the bar on safety and quality in the industry.

Copies of the A10.48 Standard are available for purchase online directly from NATE’s website. Once your order has been submitted through NATE’s website, the credit card provided will be charged $150 and you will be directed to a one-time link that allows you to download a PDF of the standard.

NATE-Abenity Membership Perks

NATE is proud to add to our Member’s experience and offer tangible pocket-book benefits by partnering with Abenity, Inc. to provide a private perks and discount program. These exclusive discounts, available to NATE member companies and their employees ONLY, include savings on thousands of hotels, restaurants, entertainment opportunities and other attractions nationwide.

These new benefits are tailor-made for our industry given the extensive travel that occurs at the state, regional and national levels. Tower crews and employees working with a daily per-diem rate can take advantage of significant savings on hotel and food while traveling. These easily accessible benefits will be a tremendous value-add to member companies and their employees.

Non-Profit Membership Category

The Association has developed a Non-Profit membership category. NATE Non-Profit Members are associations, educational institutions, community colleges, trade organizations, business leagues and chambers of commerce that have an IRS status of 501(c)(3) or 501(c)(6).
**Public Entity Membership Category**

The Association has developed a Public Entity membership category. Public Entity members are classified as any entity that is non-profit or receives public funding whose affiliation with the communication tower industry includes contracting with tower construction, service and maintenance firms and/or providing public safety services and/or public utilities. Examples of this type of membership category include; agencies that are involved with Federal, State, Tribal and Local public safety: Emergency Management, EMS First Responders, Law Enforcement and Fire Departments, and companies who provide electrical, gas and internet utilities.

**Technology Membership Category**

In order to prepare for the rapid advances in technology the industry is facing, NATE offers a Technology membership category. Technology members are comprised of companies whose primary source of revenue is derived from the manufacturing, sales, and design of Unmanned Aerial Systems (UAS) and related software; provides inspection, data acquisition/processing, and commercial services to the tower industry through the operation of UAS; provides training for the operation of UAS; or is a UAS consulting or maintenance firm. The Technology membership category also includes companies whose primary source of revenue is derived from the manufacturing, sales and/or design of new technologies and products associated with 5G Wireless Systems, the Internet of Things (IoT), smart cities, mobile devices, cloud computing, software, big data analytics, wearables and other emerging innovations.

**Licensed Design Professional Membership Category**

The NATE Licensed Design Professional is a membership category dedicated specifically to individuals who provide engineering and design services to the wireless and broadcast tower industry.

The Licensed Design Professional membership category will allow NATE to bridge the gap between the design community and construction community during a time of explosive growth in wireless infrastructure deployment activities across the globe. As part of the membership application process, the Licensed Design Professional is required to submit their Professional License stamp on the NATE Membership Application in the designated area of the form.

The establishment of the individual Licensed Design Professional membership category will help create a prominent platform and voice from the design community directly to NATE at a time when industry standards continue to play a more significant role in enhancing safety and quality. Through the addition of this new membership category, NATE is once again demonstrating that our membership encompasses the entire wireless communications tower ecosystem.

**Increasing NATE’s International Membership**

NATE continues its efforts to increase its membership across borders through a joint marketing agreement with TowerXchange, an international tower industry media company. This promotional partnership will continue to be beneficial and will help the Association expand its influence to international stakeholders engaged in the communications tower industry. It is a high priority for NATE to continue to grow its international membership and this partnership is a good start. After all, safety has no borders.

**NATE EXCHANGE**

The NATE EXCHANGE continues to be a “go-to” website platform for tower construction and maintenance companies and individual tower technicians to gain access to training courses in the tower industry.

The EXCHANGE is a valuable benefit as NATE member companies qualify for discounted rates on designated training courses offered on the website portal. Additionally, the NATE EXCHANGE allows course participants to submit online evaluations upon completion of their courses; which allows the Association to assess the quality of the courses offered on the EXCHANGE.

The Association is proud to promote the courses listed on the EXCHANGE and we encourage you to utilize this website tool to select the courses and training companies that are the best fit for your workforce specific needs.

To access the NATE EXCHANGE, visit [www.nate-home.com/nate-exchange](http://www.nate-home.com/nate-exchange) today!

**NATE Webinars**

NATE hosts webinars on timely and relevant issues impacting the industry. Industry professionals and subject matter experts deliver informative presentations that provide solutions and advice to participants on how to best navigate these issues within their respective companies. The NATE webinars provide professional

CONTINUED ON NEXT PAGE
NATE Website

In 2018, NATE unveiled a new website to reflect the Association’s dynamic growth and breadth of resources. The eye-catching new website incorporates user-friendly and interactive features designed to foster engagement from visitors to the site. Prominent features of the new website platform include epic aerial footage captured by drones, convenient access to the Association’s popular #ClimberConnection video series, a news section that includes industry news and NATE press releases and a section of the home page devoted to highlighting aggregated social media photos from members who interact with NATE on social media using the #ElevateWireless tagline.

Additionally, the new website serves as a one-stop shop destination for member companies and industry stakeholders to access prominent NATE resources, best practice documents and consensus standards that drive safety and quality in the industry.

NATE Elevate Wireless Logo

NATE’s rebranded logo captures the essence of the Association’s proud past while embracing the evolving nature of the industry’s future. The NATE Logo, which includes the “Elevate Wireless” tagline, is a key component of the Association’s marketing and branding efforts.

Legal Affiliations

NATE continues to maintain affiliations with prominent law firms who specialize in telecommunications, labor and small business legal matters. These industry firms include Fisher & Phillips, LLP, Fletcher Heald & Hildreth, and Seyfarth Shaw LLP.

Safety Resources

NATE offers invaluable safety resources for the industry to utilize. These resources continue to allow NATE members to develop their own safety regimens based on recognized best practices, an essential component of advancing a culture of safety. Several of NATE’s most popular safety resources are highlighted on page 40.
Meetup Americas 2019

A unique networking opportunity with 250 leaders of the CALA telecom tower industry

Top towercos, MNOs, investors, advisors and solution providers active across Central and Latin America will gather in Boca Raton, 9-10 July 2019, for the 6th edition of the TowerXchange Meetup Americas.

What to expect:

- 250+ key experts under one roof to discuss and learn more about the strategic, operational and financial challenges of doing business in CALA
- Formal panel discussions mixed with TowerXchange’s unique networking roundtables & working groups
- Countless hours of business interaction in the prestigious corniche of the Boca Raton Resort & Club
- Enhanced focus on technical and operational know-how, in line with the critical changes occurring across the CALA telecom infrastructure industry

Participating companies include SBA Communications, Entel Chile, American Tower, Phoenix Tower International, Inter-American Development Bank, Mexico Tower Partners, Telefónica, Torrecom, Tower One Wireless, Digital Bridge and more...

Find out all the details at www.towerxchange.com/meetup/meetup-americas/ Quote TXAM19NATE
The NATE Safety & Education Committee developed the Anchor Inspection/Safe to Climb Guide that owners, managers and field staff can refer to in making a “judgment call” on whether or not to climb without foreknowledge of the condition of the underground anchors. NATE is committed to continue to bring awareness within our industry on this out-of-site and unfortunately sometimes out-of-mind issue.

**Qualified Contractors Evaluation Checklist**

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

**Tower Climber Orientation**

This free, online orientation program is designed to introduce prospective tower climbers to the profession, focus on the unique responsibilities of a tower climber and shine the spotlight on the prominent role a tower climber plays in the industry. NATE encourages all of our member companies to utilize the Tower Climber Orientation by incorporating it into their internal hiring and training procedures.

**Equipment Basics Checklist**

The Equipment Basics Checklist allows tower industry personnel to document the status of their field equipment, take notes and rate them under the categories of satisfactory condition or remove from service. The checklist contains the most comprehensive list of tower industry equipment available today.

**NATE Safety Posters**

The NATE Safety posters were developed by the Safety & Education Committee and are published in Tower Times magazine. Companies are encouraged to place these posters in a visible location at their businesses in order to serve as a daily safety reminder for employers and employees alike.

**Anchor Inspection/Safe to Climb Guide Document**

Guy anchors in direct contact with soil have proven to be susceptible to galvanic corrosion. As telecommunications towers come of age, the issue has been brought forefront due to tower failures caused by guy anchor corrosion and the inherent life-safety risk to technicians.
NATE UNITE

NATE UNITE, long regarded as the premier conference and trade show in the wireless infrastructure industry, is hosted by the Association on an annual basis. NATE UNITE 2019 in Grapevine, Texas was a resounding success which included a record-breaking number of attendees.

NATE UNITE remains an annual success due to the tremendous sponsor, exhibitor and attendee support provided by so many companies, stakeholders and individuals from throughout the wireless industry. The record-setting accomplishments of NATE UNITE 2019 are also a testament to NATE’s ability to evolve along with the wireless industry.

Tower Family Foundation

In 2018, the Foundation awarded $168,500 in direct financial assistance and scholarships to affected families and has donated over $601,000 to eligible benefactors since the organization’s launch in September 2014. These generous contributions have been instrumental to the Tower Family Foundation’s success and are making an indelible impact by allowing the organization to fulfill its mission of taking care of tower workers and their families.

The Tower Family Foundation also had a successful fundraising effort over the course of the past year. In 2018, the organization officially launched the “$1 Per Tower” campaign to raise funds from firms who own and manage vertical communications infrastructure sites who commit to donating $1 for every tower the company owns directly to the Foundation.

Throughout 2018, several State Wireless Associations designated the Tower Family Foundation as the benefactor of their golf or other fundraising events. Additionally, T-Mobile continued their generous track record of philanthropy by donating $180,000 directly to the Foundation at their 5th Annual National Development Golf Tournament in Newcastle, Washington.

In an act of transparency, the Tower Family Foundation, a 501(c)(3) non-profit, touted the organization’s strong financial management and stewardship track record in an industry-wide announcement. Independent certified public accounting firm VRS P.C. calculated that the Tower Family Foundation’s administrative expenses for the year ending December 31, 2017 as a percentage of total revenue was 2.73%. The VRS P.C. report was conducted in accordance with attestation standards established by the American Institute of Certified Public Accountants.

The Tower Family Foundation continues to be steadfastly devoted to fulfilling its core mission by providing both immediate financial assistance and scholarship funds to eligible industry workers and their families during times of need. This independent accounting calculation shines a spotlight on the fact that over 97 cents of every dollar sent to the Tower Family Foundation goes directly to eligible benefactors. You would be hard-pressed to find a non-profit organization anywhere in the country that operates with administrative expenses this lean.

NATE encourages all industry stakeholders to help us spread the word about the resources the Foundation has available and consider a donation in order to ensure that we are able to fulfill our mission of supporting tower workers and their families during times of need. To learn more about the Tower Family Foundation, visit http://towerfamilyfoundation.org/ today.

National Wireless Safety Alliance

National Wireless Safety Alliance (NWSA) is a Fairfax, Virginia based 501(c)(6) non-profit assessment and certification organization that NATE helped establish in 2015.

NWSA currently offers the following industry-wide certification programs: Telecommunications Tower Technician 1 (TTT-1) and Telecommunications Tower Technician 2 (TTT-2), Telecommunications Tower Foreman and Antenna & Line Specialty Certification Programs.

These programs were developed by the NWSA’s of subject matter experts from all aspects of the communications industry - tower technicians, carriers, tower owners/vertical realtors, OEM's contractors, trainers, manufacturers and suppliers - who together represent many thousands of hours of related telecommunications and tower experience.

These NWSA national and portable worker credentialing offerings fulfill the organization’s goal of develop-
ing upward mobility among the professional workforce by providing career progression of certification pathways. Other assessment and certification programs NWSA will likely unveil, in the future, include Rigging, DAS Systems, Small Cell Systems, Broadcast Structures and Outside Plant/Fiber to the Home and Business.

NWSA’s certification offerings are a game-changer for the industry and will have a major impact in terms of shaping a skilled and safe workforce that is capable of meeting the industry’s intense buildout demands. Industry workers, companies and stakeholders are encouraged to visit the NWSA website at www.nws-a.org to learn more about the organization and how to begin the process of obtaining certification.

Professionalizing the Workforce through NWSA Certification

NATE’s commitment to workforce development is highlighted in the Association’s investment in providing the initial round of seed funding to support the launch of the National Wireless Safety Alliance (NWSA). NWSA is a 501(c)(6) assessment and certification organization that provides nationwide, portable worker credentials to tower technicians at progressive worker categories in order to ensure continued excellence and professionalism in the industry. After workers obtain training to become a tower technician, companies have an opportunity to ensure that their workers obtain NWSA certification credentials. Workers, regardless of their training pathway, will ultimately be required to take a standardized NWSA knowledge and field-based assessment. The NWSA certification card is a source of pride for industry workers and will ultimately raise the bar on safety and quality.

Conclusion

The Association has accomplished record-breaking feats and experienced organic growth by staying true to NATE’s mission and capitalizing on the dynamic nature of the industry. The list of new industry initiatives and offerings available to member companies is a direct result of NATE’s leadership and position in the wireless and broadcast infrastructure industries. The Association is just getting started so join us in this movement!

ELEVATING THE INDUSTRY (CONTINUED)
MAKE YOUR PLANS TODAY!

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Event Sponsors

WELCOME CAFÉ SPONSOR

TUESDAY BEVERAGE BREAK
# SPONSORSHIP PACKAGES

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<th>Infinity</th>
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| Exclusive Sponsor | YES | | | | |
| 10’ x 10’ Meeting Module in Exhibit Hall | YES | | | | |
| **Booth Space Included**¹ (booth upgrade optional with additional fee*) | 20’ x 20” | 10’ x 20” | 10’ x 10” | | |
| Full Conference Passes | 30 | 15 | 10 | 5 | 3 | 2 |
| **NATE UNITE Educational Session Speaking Opportunity**² | YES | | | | |
| **Tower Times Four-Color Ads**³ | 2 Full Page Ads | 1 Full Page Ad | 1 1/2 Page Ad | 1 1/2 Page Ad | 1 1/2 Page Ad | 1 1/4 Page Ad |
| **NATE UNITE Online Rotating Monthly Ads**⁴ | 3 Online Ads | 1 Online Ad | 1 Online Ad | 1 Online Ad | | |
| **Company Name and/or Logo on Show Shirts**⁵ | Premier Placement | Prominent Placement | YES | YES | YES | YES |
| **Company Name and/or Logo on Show Lanyards** | YES | | | | |
| **Company Profile and Description in NATE UNITE Show Guide**⁶ | 70 Words | 50 Words | 30 Words | | |
| **NATE UNITE Show Guide Full-Color Ads** | 2 Full Page Ads | 1 Full Page Ad | 1 2/3 Page Ad | 1 2/3 Page Ad | 1 1/2 Page Ad | 1 1/4 Page Ad |
| **Company Name and/or Logo on Show Signage/Banners**⁷ | Premier Placement | Prominent Placement | YES | YES | YES | YES |
| **Company Logo Reception Drink Tickets** | 200 Tickets | | | | |
| **Acknowledged at NATE UNITE with Award** | YES | YES | YES | YES | YES | YES |
| **Company Name and/or Logo on NATE UNITE Website** | Premier Placement | Prominent Placement | YES | YES | YES | YES |
| **Company Name and/or Logo on NATE UNITE Marketing Materials**⁸ | Premier Placement | Prominent Placement | YES | YES | YES | YES |
| **8½” x 11” Flyer Distributed at NATE Information Booth** | YES | | | | |
| **First Right of Refusal as the NATE UNITE 2021 Infinity Sponsor**⁹ | YES | | | | |

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| Booth Space Included | Priority booth selection with sponsorship secured prior to June 1, 2019. Contact NATE Event Coordinator for booth upgrade (optional with additional fee). |
| NATE UNITE Educational Session Speaking Opportunity | One educational session speaking opportunity with sponsorship secured prior to June 1, 2019. |
| Tower Times Full-Color Ads | Your choice of placement in the September/October 2019, November/December 2019, January/February 2020 or March/April 2020 issue(s). Exact size of ad to be determined. NATE Staff will work with sponsors regarding ads. |
| NATE UNITE Online Rotating Monthly Ads | One 300 pixels wide x 250 pixels high online rotating ad on the NATE website in 2020. Ads are visible on each page and are scheduled on a monthly basis. |
| Company Name and/or Logo on Show Shirts | Inclusion on show t-shirt with sponsorship secured prior to January 6, 2020. |
| Company Profile and Description in NATE UNITE Show Guide | Inclusion in Show Guide with sponsorship secured prior to January 6, 2020. |
| Company Name and/or Logo on Show Signage/Banners | Inclusion on show signage/banners with sponsorship secured prior to January 6, 2020. |
| Company Name and/or Logo on NATE UNITE Marketing Materials | Inclusion on show direct mail materials with sponsorship secured prior to September 1, 2019. |
| First Right of Refusal as the NATE UNITE 2021 Infinity Sponsor | Secured prior to June 1, 2019. |
## ADDITIONAL EVENT SPONSORSHIP OPPORTUNITIES

**NATE UNITE 2020**  
February 17-20 | Raleigh, NC

<table>
<thead>
<tr>
<th>Event</th>
<th>Cost</th>
<th>Company Name/Logo on Website</th>
<th>Company Name/Logo on Signage</th>
<th>Acknowledged in Show Guide</th>
<th>Promotional Item Approved by NATE (provided by sponsor/distributed at function)</th>
<th>Full Conference Passes</th>
<th>Company Name/Logo Displayed During Function</th>
<th>100 Drink Tickets for Sponsored Function</th>
<th>Email Invitation Showcasing Sponsor for Function</th>
<th>Company Logo Included on Agenda Table Tent</th>
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</table>

### Sponsorship Benefits

- Company recognition during sponsored event.
- Signage in the sponsored event room/area (if package is secured prior to January 1, 2020).
- Company name and/or logo recognition as event sponsor in NATE UNITE 2020 Show Guide (if package is secured prior to January 1, 2020).
- Company name and/or logo recognition as event sponsor in *Tower Times* leading up to the event.
- Company name and/or logo recognition as event sponsor in *Tower Times* post show issue.
- First right of refusal for same function at NATE UNITE 2021 event (if package is secured prior to July 1, 2019).
Every year, the month of June is set aside as National Safety Month. During that month, each week has a specific theme that employers are urged to focus on with their workers to promote safety and awareness in the workplace.

Earlier today, I was reading an article by a loss control specialist for a major insurance company, and in this article, he emphasized that unsafe work practices cause four times as many occupational accidents as unsafe conditions.

In other words, our actions cause more accidents and injuries than our environment.

With that said, let’s focus on that approach as we look at the four main topics for this year’s National Safety Month:

Week 1 – Hazard Recognition

Start by developing a hazard recognition process and training module designed to heighten awareness, strengthen understanding of the logic behind hazard identification, and equip your workers to better be able to perform high-value, highly effective hazard recognition examinations of job sites.

To do this, start small and make it personal. It must start with education and training. Start in the classroom setting and educate their minds. Use examples they can relate to; often, starting with common situations in the home can be very effective before we move into the workplace. Most workers place home safety ahead of workplace safety, and will relate much quicker when it hits close to home (pun intended). Educate them on the losses that can result (make it personal to them) if they are hurt because of a hazardous act or condition, and then start to move the discussion into the workplace.

As with everything, give them the right tools. Checklists and information from prior job hazard analysis are excellent starting points. Using these together with an understanding of the hierarchy of controls provides for a much more thorough examination of the job site and tasks to identify potential hazards, and it increases the likelihood that good controls will be created by the workers right there on the site. The results I have seen support that expectation.

Week 2 – Slips, Trips and Falls

Slips, trips, and falls are among the most common causes of injury on the job and at home. Everyone slips, trips, or falls on occasion, but sometimes the result can be serious, painful -- and even deadly -- injuries. It’s important to recognize slip, trip, and fall hazards on the job when you see them so that you can take proper precautions to prevent accidents and protect yourself and coworkers from injury.

As an industry, we devote (rightfully) an extraordinary amount of time on fall prevention and fall protection. But when was the last time you addressed slips and trips?

Much of what we just talked about in hazard recognition can carry over to slip and trip prevention. Housekeeping issues on a job site can greatly reduce the trip hazards that might exist. Job foremen, supervisors, site supervisors…whatever you call them on your sites should all be trained in safety management techniques, and in hazard recognition. But the responsibility doesn’t end with the supervisor. Each employee must accept responsibility for his or her own safety. I always remember a sticker I once saw on a mirror over a slop sink in the shop at a client site. The sticker simply said “you are now looking at the person most responsible for your safety.” That message is just too simple!

Slip related injuries are often overlooked, but can be equally dangerous. On the job site (aside from slipping while on the tower), slipping on the ground seems unlikely...or is it?
Twisted ankles, knee strains and back injuries are the most common slip related injuries; but, depending on how a person falls, fractures and muscle tears may also occur.

At the start of each day, your employees should survey the jobsite in order to identify slip or trip problem areas to be aware of or avoid. This includes:

- Identifying the ruts, slippery conditions, and other uneven ground on the worksite.
- Identifying holes and trenches on the site and covering them and/or roping them off with caution tape to prevent access to the area.
- Keeping shoe and boot tread clean to provide better traction.
- Not taking shortcuts through debris piles.

**Week 3 – Fatigue**

While I sit here in my office shivering because winter refuses to lessen her grip, it also won’t be long until summer is upon us, and heat and extreme temperatures become a challenge. Worker fatigue is often an overlooked hazard on the job site. Fatigue, whether physical or mental, impairs a worker’s ability to safely and effectively perform their job duties. It increases the risk of accidents and injuries which can lead to unnecessary workers’ compensation costs and can greatly reduce productivity on a project.

Fatigue makes it harder to concentrate on tasks and impairs a worker’s judgment and decision making. This can lead to a worker making careless, and often costly, mistakes. Extremely fatigued workers may nod off or fall asleep on the job. In an effort to decreased productivity and increased risks for accidents and injuries, workers suffering from fatigue are often irritable and lack the motivation to properly perform their job duties.

To combat fatigue, employers should develop a fatigue management plan to help reduce the risk of fatigue-related accidents. Employers should make workers aware of the dangers of working while fatigued. Don’t overload workers with too much or put unrealistic expectations for the completion of tasks because workers will feel compelled to push themselves too hard to complete them.

**Week 4 – Impairment**

Construction, entertainment, recreation and food service sectors have twice the national average of employees with substance use disorders. According to the National Safety Council:

- Industries dominated by women or older adults had a two-thirds lower rate of substance abuse.
- Industries that have higher numbers of workers with alcohol use disorders also had more illicit drug, pain medication and marijuana use disorders.
- Employers were most concerned about the costs of benefits (95%), the ability to hire qualified workers (93%) and the costs of workers’ compensation (84%) – but less concerned over drug misuse (67%) and illegal drug sale or use (61%).
- Workers in recovery have lower turnover rates and are less likely to miss work days, less likely to be hospitalized and have fewer doctor visits.

When you look at the tower erection industry, like other areas of the construction industry there are stressors that can result in substance abuse. Long hours, routine activities or predictability, and limited opportunities for advancement can all be contributing factors.

Policies regarding substance use on the job should be clearly stated. The ramifications for abusing substances on the job should be outlined and understood by all workers.

Management should be trained in recognizing the signs of substance use disorders and substance abuse in workers. Individuals displaying these signs should be evaluated, especially if they show signs of low productivity or are involved in workplace accidents. In addition, coworkers should be encouraged to discuss concerns with management in a climate of strict confidentiality.

In risk management, we are trained that there are five steps that we can use to lessen the risk of a loss occurring:

- Exposure avoidance
- Risk control
- Risk reduction
- Separation of exposures
- Risk financing

Exposure avoidance techniques and risk control techniques should be given the highest priorities, as these are the techniques that will keep your workers safe, keep your loss modifier where you need it to be, and save you money. Never miss an opportunity to improve workplace safety, and never pass up a safety training opportunity in the field. The results will be plentiful!

Stay safe and stay in touch!
NATE Executive Director Todd Schlekeway poses for a photo with representatives of NATE member companies Tower Engineering Professionals Inc. and NFP Corporate Services (SE), Inc. after touring the Tower Engineering Professionals headquarters in Raleigh, NC. (L to R): Harry Floyd (NFP), Matthew Collins (Tower Engineering Professionals), Trent Johnson (Tower Engineering Professionals), Michael Gardner (Tower Engineering Professionals), Andrew Haldane (Tower Engineering Professionals) and Todd Schlekeway (NATE).

Women of NATE was well represented at IWCE 2019 in March by NATE Chief Operating Officer Paula Nurnberg, WON Committee Member Shama Ray of Above All Tower Climbing, LLC, WON Chairwoman Andy Lee of Lee Antenna & Line Service, Inc. and WON Committee Member Diane Mueller of Primus Electronics.

WON Committee Member and NATE Wireless Industry Network Washington State Liaison Heather Gastelum of T-Mobile represented Women of NATE and NATE WIN at the 8th Annual South Wireless Summit in Nashville, Tennessee in March.

FCC Commissioner Brendan Carr visits with 20-year TUF-TUG Products, Deuer Developments employee Terry about TUF-TUG’s steel stamping machine.

Joey Deuer of TUF-TUG Products, Deuer Developments gives FCC Commissioner Brendan Carr a tour of the facility.
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NATE Board Member Shama Ray and Jack Ray of Above All Tower Climbing, LLC, and NATE WIN Pacific Regional Ambassador Jesse Petrilla of Petrilla Technologies, LLC spend time in the NATE booth at IWCE 2019.

WON Committee Chairwoman Andy Lee of Lee Antenna & Line Service, Inc. visits with future NATE Members at the NATE booth at IWCE 2019.

Various NATE Administrative Team Members, NATE Members, and visitors at the NATE booth at IWCE 2019.

WON Committee Chairwoman Andy Lee of Lee Antenna & Line Service, Inc., NATE Board Member Shama Ray of Above All Tower Climbing, LLC, NATE Chief Operating Officer Paula Nurnberg, and long-time NATE Member Arlen Dykema of Radio Towers, Inc. at the NATE booth at IWCE 2019.

NATE Board Member Shama Ray and Jack Ray of Above All Tower Climbing, LLC, and NATE WIN Pacific Regional Ambassador Jesse Petrilla of Petrilla Technologies, LLC spend time in the NATE booth at IWCE 2019.
NATIONAL SAFETY STAND-DOWN
TO PREVENT FALLS IN CONSTRUCTION

MAY 6–10, 2019

Stop Falls Stand-Down

- Plan a toolbox talk or other safety activity
- Take a break to talk about how to prevent falls
- Provide training for all workers

For more information:
www.osha.gov/StopFallsStandDown
#StandDown4Safety • (800) 321-OSHA (6742)
Hang Out with Winners!

NATE UNITE 2019 was another huge success, and I am already looking forward to NATE UNITE 2020. It is always fun to reconnect with friends and share ideas. Year after year, the one thing that always remains steady at our NATE Annual Conference is the focus on safety. It is so impressive to see the genuine interest and concern for safety among NATE members and it has been interesting to see the topic of safety evolve for the good at the NATE Conference through the years.

I always enjoy seeing NATE members share ideas with each other and have genuine concern for their fellow NATE members. I have had the privilege of working with many telecom companies, both NATE members and non-NATE members, through the years. I see the same concerns over and over: turnover, payment terms, lack of talent, and regulation. The best in class companies who my company does business with are companies who embrace safety and share ideas. Those companies are generally more productive, have less turnover and are more profitable. Those companies are almost all NATE members.

In my opinion, the best way to improve safety and profitability is to hang out with winners.

Motivational speaker Jim Rohn said it this way, “If you want to be in great physical shape hang out with five people who are in shape and you will be the sixth. If you want to be a winner hang out with five winners and you will be the sixth.”

If you want to be BEST in CLASS as a telecom company, come to NATE UNITE and hang out with five folks who are winners and you will be the sixth.

Join us at NATE UNITE 2020 in Raleigh, North Carolina! Booth space contracts received in the
Introduction

Since it codified the Multi-Employer Worksite Doctrine twenty years ago, OSHA has routinely cited multiple employers at the same worksite for the same violations. The Multi-Employer Worksite Doctrine has allowed OSHA to extend liability to general contractors, host employers, staffing agencies, and anyone else who can be conceivably related to an employee accident or alleged safety hazard. In Secretary of Labor v. Suncor Energy (U.S.A.) Inc., OSHRC Docket No. 13-0900, the Commission issued a significant decision reining in OSHA’s “scattershot approach” to cite all employers at a worksite. The Commission held that OSHA had misused the doctrine as a form of strict liability against “controlling employers” who had performed their high-level duties with regard to safety.

Moving forward, OSHA will be required to hold the controlling employer liable only based on objectively reasonable evidence that the employer failed to meet its more limited duty of care.

Further, this decision will help guide employers in how to avoid multi-employer worksite and “controlling employer” liability going forward, and provide some solace that a rigorous safety program and efforts to promote employee safety will not be in vain and be used improperly against the employer by OSHA.

Multi-Employer Worksite Doctrine

With its Multi-Employer Citation Policy in 1999, federal OSHA codified its Multi-Employer Worksite Doctrine which allows the Agency to cite several employers for alleged violation at the same worksite. Multi-employer worksites exist where there are a number of employers at the same worksite. Each employer has OSHA duties not only to its own employees but also to other employer’s employees at the site depending on whether the employer is one of the following:

- employer who creates the hazard for other employees;
- employer who exposes the other employee to the hazard;
- employer who is responsible to correct the hazard to which the other employees may be exposed; or
- employer who has control over the worksite or a particular hazard, typically the owner of the worksite, a general contractor or a subcontractor with a sub subcontractor.

Many employers are totally unaware of these liabilities and fail to take appropriate action to protect other employees, who may be at the worksite, including:

- independent contractor employees;
- temporary staffing employees; and
- subcontractors.

Mark A. Lies, II is a Labor and Employment Law attorney and Partner with Seyfarth Shaw LLP in Chicago, Illinois. Mr. Lies can be contacted at 312-460-5877 or mlies@seyfarth.com.
Multi-employer worksites exist in construction and in general industry.

Employers and industry advocates have criticized OSHA for employing this policy in an unfair manner that is unproductive in terms of employee safety. OSHA compliance officers routinely will enter a worksite on an inspection and cite all the present employers, regardless of their role in employee safety. Not all employers have the same duties of care and inspection and the worksite, and the law permits employers to delegate safety responsibilities along with work to third party contractors. Further, employers often delegate certain safety training, supervision, and enforcement responsibilities. If OSHA cites a host employer merely because an accident occurred on its worksite, it may cite an employer who has never seen the injured employee and who met all of its duties required by law. This method of enforcement instead creates a type of “strict liability” for accidents, where any employer with a conceivable role in the worksite will be cited. It is part of the “shoot first, ask questions later” approach that many OSHA compliance officers unfortunately appear to employ instead of conducting a reasonable and appropriate investigation and which the Review Commission criticized. Moreover, this approach is contrary to the critical element of a federal OSHA citation which requires employer knowledge of the alleged violation: an employer needs to know or should have known of a violative condition to be cited by OSHA. Finally, this overbroad approach leaves employers unable to reasonably determine their compliance responsibilities under the Act. Employers may be deterred from involving themselves at the worksite, conducting inspections, or maintaining a rigorous safety program, for fear of being labeled by inference as an “employer” of any individual who sets foot on a worksite.

Employers across industries are faced with difficult questions, including:

- What documentation by way of contracts or other agreements is acceptable to OSHA to delineate the relative responsibilities of employers at a multi-employer worksite for safety compliance?

- Should a general contractor be required to train subcontractor employees on specific areas of the subcontractor’s specialization?

- Can the general contractor rely on its specialized subcontractors to conduct and document employee training?

- Can a host employer use a staffing company to train and supervise staffing company employees?

- Will host employers be liable for OSHA violations that occur that only the staffing company management are aware of?

- Which employer is required to inspect the worksite?

- Can the host employer rely on inspections performed by the competent person of its subcontractor?

The Commission’s decision in Secretary of Labor v. Suncor Energy (U.S.A.) Inc., OSHRC Docket No. 13-0900 helps to answer employers’ pressing questions.

**Facts of Suncor Case**

Suncor operated a massive refinery complex, covering 230 acres and three separate plants. In fall 2012, Suncor completed several capital improvement projects. One of the capital projects involved replacing the tubes in a heater, a permit-required confined space. The work on this heater was performed by several third-party specialty contractors, including a company called Mistras.

To perform work inside the heater, Suncor required each contractor first to obtain a “safe work permit” from Suncor’s operations division. The contractor had to initiate and generate the permit on Suncor’s computerized system. The permit was then electronically transferred to Suncor’s operations division, where Suncor’s turnaround coordinator and confined space supervisor would review and approve it.

After obtaining the safe work permit from Suncor and before starting work, a crew from Mistras performed a job safety analysis, which identified a potential fall hazard from an elevated surface and stated the need for fall protection and a harness. The two Mistras employees assigned to examine welds in the area entered the area wearing harnesses, but neither employee used a lanyard, yo-yo, or any other fall-restraining device. A third Mistras employee served as primary confined space attendant. Once inside, one Mistras employee served as primary confined space attendant. Once inside, one Mistras employee inspected welds from an outrigger platform which did not have guardrails. After approximately two to three hours of work, the employee fell off the platform through a gap between scaffolding and the wall of the heater, landing on the ground 25 feet below. The unfortunate accident resulted in severe injuries to the employee.

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Citation and ALJ Decision

Under the fall protection in construction standard, section 1926.451(g)(1), states in relevant part: “Each employee on a scaffold more than 10 feet (3.1 m) above a lower level shall be protected from falling to that lower level.” OSHA issued a Citation under this regulation to Suncor, alleging that “the Company did not ensure that [Mistras’s] employees were protected from falling while working on a tubular welded system scaffold.” The Secretary asserted that Suncor was liable under the Multi-Employer Worksite Doctrine as a “controlling employer” at the refinery because it had general supervisory authority over its contractors and controlled their access to the inside of the tube area through its permit system. Accordingly, the Judge found that Suncor violated the Act by failing to ensure that the Mistras employee wore fall protection. To reach that conclusion, the Judge reasoned that Suncor failed to exercise reasonable care because it did not make use of various opportunities “to become aware of [the violative condition] and prevent the accident[,]” and therefore “should have known of the violative condition.”

Commission’s Reversal and Decision

Suncor challenged the decision, alleging that the Secretary failed to establish that Suncor had constructive knowledge of the violative condition as a controlling employer on a multi-employer worksite. The Commission ruled that the Judge’s approach had been misguided, focusing on whether Suncor knew of the lack of guard rails on the platform rather than whether Mistras was using fall protection equipment, the nature of the regulation. The Commission performed an analysis of whether the controlling employer has met its duty to exercise reasonable care, analyzing several factors related to the alleged violative condition itself and those that related to the employer’s duty to monitor or inspect.

The Commission found no basis to conclude that Suncor should have known of the Mistras employee’s failure to use personal fall protection. The Commission examined Suncor’s duty given it’s a “secondary safety role” as a host employer and in light of objective factors—the nature of the work, the scale of the project, and the safety history and experience of the contractors involved. The Judge found that Suncor could rely on Mistras to perform job safety analysis and determine where fall protection is needed, and then require its employees to use the fall protection they wear. The Commission merely required Suncor to “exercise reasonable care” as the host employer, which meant that it was not obligated to inspect inside every confined space on its worksite and do an independent analysis before assigning work to contractors.

The Commission excoriated the Secretary of Labor’s “scattershot approach” with this citation, citing the host employer where it had a rigorous safety program in place. Further, the Commission made clear that the host employer is “not required to inspect the worksite as intensively as an employer whose own employees are exposed.” The Commission explained that the applying the Multi-Employer Worksite Doctrine here would “to in effect hold controlling employers strictly liable for the safety shortcomings of their contractors is both unfair and counter-productive.” (emphasis added). Finally, the Commission explained that the citation “should not have been issued in the first place” and that the Secretary’s choice to litigate “diverted resources away” from employee safety and health.

Takeaways

The Commission’s message in this case is pointed and important -- host employers who maintain a rigorous safety and health program will not be held to the same duty of care and inquiry as their specialty subcontractors. Host employers (and general contractors) will not be required to independently assess and supervise all third party contractor work. The Commission’s ruling thereby provides cover for employers to do the things that help improve employee safety -- their use of a safety program and review of third party work will not make them strictly liable for any violations of that third party contractor.

Employers should take an active approach to safety and enforce a rigorous program that protects employees. Employers should craft their agreements with subcontractors or independent contractors carefully, to minimize their OSHA and tort liabilities. If OSHA opens an inspection on a multi-employer worksite, employers should promptly contact outside counsel to preserve privileges, defend the inspection, and prevent the issuance of OSHA citations.

NOTE: If you wish to receive complimentary copies of this article and future articles on OSHA and employment law related topics, please contact Mark A. Lies, II at mlies@seyfarth.com or Adam R. Young at ayoung@seyfarth.com to be added to the address list.
A quick glance at the list of educational sessions at NATE UNITE 2019, as well as safety communication in recent industry-specific publications shows a renewed focus on the need for safer and more sustainable rigging practices. At the time of writing, there are multiple rope and rigging subcommittees that are currently working to improve training and communications, refine standards and best practices, and consult equipment manufacturers for product innovations. These committees are made up entirely of volunteers that are investing their time and talent to ensure the workforce has access to the knowledge that, when applied, will ensure that the industry becomes a safer place.

This article is intended to continue this momentum, and compliments the recent document about the basics of rope selection, characteristics, and usage. Improved familiarity with existing regulations, standards, and best practices for rigging with synthetic rope should serve as a good starting point in the development of training, sound operating procedures, and equipment selection. This document will address the most common pieces of equipment used as part of a rigging system in telecommunications work: capstan hoists, synthetic rope, blocks, shackles, and synthetic slings.

Please note, this article is not intended to be an all-inclusive list and does not attempt to cover all equipment, jobsite-safety, or rigging fundamentals. For means and methods, the ANSI/ASSP A10.48 Standard should be consulted along with other standards and regulations that may apply to the specific work environment.

Many standards address safe rigging principles. The ANSI/ASSP A10.48 Standard provides an industry-specific point of reference in order to simplify the search for the most relevant standards. Some of the other key standards are listed on the next page. Much of the

CONTINUED ON NEXT PAGE
content in this article is derived from this list.

Applicable Standards
- ANSI A10.48
- ASME B30.26
- ASME B30.30
- Cordage Institute CI1401
- ASTM F1740
- ISO 16625

A chain is only as strong as its weakest link. The same is true for a rigging system. The ANSI/ASSP A10.48 and ASME B30 Standards do an excellent job of requiring and clarifying the Working Load Limit (WLL) of the system components. Information about the WLL requirements of each component and the source of those requirements is below. Industry best practices are to ensure the WLL of each of the components below exceeds the maximum rated capacity of the hoist/winch which will be used in a lift.

Synthetic Rope

It should be noted that establishing the WLL for synthetic rope used in our industry for hoisting applications is specifically addressed in the ANSI/ASSP A10.48 due to the simple fact synthetic ropes are not currently addressed within other recognized consensus standards for this particular application. It is therefore essential for those working with synthetic ropes to be trained and knowledgeable on the requirements for properly determining the applicable WLL using a minimum gross 10:1 safety factor applied to the rope manufacturer’s published minimum breaking strength (MBS) which builds in efficiency losses up to 50% for typical knot terminations and wrap efficiencies thus netting an effective safety factor no less than 5:1.

Synthetic Slings

Synthetic slings require a minimum 5:1 safety factor in accordance with the ASME B30.9 with the rated WLL based upon the type of sling hitch.

Shackles

Standard shackles used in our industry require a minimum 5:1 safety factor in accordance with the ASME B30.26.

Blocks

Rigging blocks require a minimum 4:1 safety factor in accordance with the ASME B30.26.

The establishment of minimum safety factors for each of the rigging components is only beneficial if those in the field fully understand the loading demands and are able to clearly discern the rated capacity for each component within the system. As a result, the standards which dictate the safety factors have also generated labeling requirements which are intended to eliminate accidental overloads. Below are the labeling requirements for each of the components. One additional note - the labels must be legible throughout the service life of the product. If a label becomes illegible or is removed from the product, it must be removed from service.

Synthetic Rope

The ANSI/ASSP A10.48 doesn’t specify labeling requirements for rope, but does require that “Synthetic rope shall not be used unless there is documentation available verifying its minimum breaking strength (MBS).” The commonly accepted best practice at this point is that the rope is tagged with the MBS, production date, original length, and diameter.

Synthetic Slings

ASME B30.9 requires that synthetic slings be marked with the manufacturer’s name or trademark, material composition of the sling, manufacturer’s code or stock number, and the rated WLL in at least one hitch type; although, standard practice is to clearly label the WLL for vertical, choked, and basket hitch configurations.

Shackles

ASME B30.26 mandates that the shackle body be durably marked with the name or trademark of the manufacturer, the rated WLL, and the size. Additionally, the shackle pin must be labeled with the name or trademark of the manufacturer, and the grade, material type,
and/or WLL rating. The ANSI/ASSP A10.48 Standard further dictates that the WLL be provided in pounds or tons.

Blocks

ASME B30.26 requires blocks be labeled with the manufacturer’s name or trademark, the rated WLL, and the compatible rope size(s). Like shackles, the ANSI/ASSP A10.48 Standard further dictates that the WLL be provided in pounds or tons.

With the inherent versatility of common slings and shackles, there are few special compatibility concerns other than ensuring only OEM approved parts be used for items such as replacement shackles pins. That said, there are a few additional important considerations in the relationship between synthetic rope and rigging blocks that merit review.

D:d Ratio

The D:d ratio is a comparison of the pitch diameter around which a rope is being run (big “D”) vs. the nominal rope diameter (little “d”). The concern and ultimate derating from this D:d relationship involves increased and disproportionate force demands being placed on the localized extreme fibers within the rope segment located at the bend as the D:d ratio decreases.

The ANSI/ASSP A10.48 dictates a minimum 6:1 ratio for double-braid and kernmantle ropes, and a minimum 10:1 ratio for three-strand ropes. ASME B30.26 provides guidance on the effective calculation of the D:d ratio. The graphic on the top right illustrates the sheave pitch approach to calculating the ratio. Essentially, the center to center measurement from the rope on both sides of the block is the sheave pitch. This number is used in conjunction with the rope manufacturer’s stated diameter. For double-braid and kernmantle ropes, the sheave pitch diameter measurement must be greater than or equal to six times the diameter of the rope.

The use of the sheave pitch diameter for the D:d ratio calculation is why common ASME B30.26 compliant rigging blocks used in our industry with labeled compatible rope sizes of ½” and an inner sheave diameter slightly below 3” still meet the minimum 6:1 ratio when used with double-braid and kernmantle ropes.

Sheaves for Synthetic Rope vs. Wire Rope

With regards to the sheave groove profile, the ANSI/ASSP A10.48 states, “The size of the synthetic rope shall be compatible with the sheave groove in the rooster head and rigging blocks. Groove widths shall be greater than or equal to 1.10 times the rope diameter.” This requirement is one of the primary reasons why blocks may be categorized as either wire rope or synthetic rope blocks.

The narrower groove on the sheave of wire rope blocks introduces significant risk of rope milking or binding as it passes over the block. The wider groove enables the rope to spread over the sheave as it passes over the block enabling a smooth transition.
Industry Best Practice for Simplicity

The content on the previous page is only a surface level evaluation of the most common rigging components and relevant compatibility concerns. The generally accepted industry best-practice in order to make compliance straightforward is outlined below.

- Operate your hoist following the manufacturer’s guidelines and make your hoist’s rated capacity your “weakest link” in the overall system, which for common receiver mounted capstan hoists would be 1,000 pounds of line pull capacity.

- Ensure your rope has all of the required documentation and labels, and has a published MBS no less than 10 times the hoist capacity, or no less than 10,000 pounds assuming a 1,000 pound rated capstan.

- Ensure your rigging block(s) are designed for use with synthetic rope, compatible for your given rope size(s), have a rated WLL no less than two times the rated capacity of your rope to account for a maximum block angle factor of 2.0, and used within the operating requirements established in ASME B30.26.

- Ensure your shackles also have a rated WLL no less than two times the capacity of your rope and are used within the operating requirements established in ASME B30.26.

- Ensure that your slings have a rated WLL no less than two times the capacity of your rope while in the sling’s lowest rated choked hitch configuration and used within the operating requirements established in ASME B30.9.

In case you’re interested in learning more about rigging principles, NATE has secured support from OSHA once again via the Susan G. Harwood Training Grant. This year’s content is “Advanced Rigging Principles Training”. The course is designed to filter rigging policies and practices specifically through the lens of a tower technician, with particular emphasis on the requirements of that ANSI/ASSP A10.48 Standard. The following section outlines the content of the Advanced Rigging Principles Course.

Section 1: Introduction to NATE and OSHA

Section 2: State of the Industry

Section 3: Primary Regulations, Codes, Standards, and Policies

Section 4: Synthetic Rope

Section 5: Rigging Forces and Lift Systems

Section 6: Hoisting Operations, Execution and Communication

Visit www.natehome.com for a complete list of course dates and locations throughout 2019.

Memorial Day
May 27, 2019

All gave some... some gave all.

Remember those who served.
NATE values and appreciates the role that our members play in the industry. This Member Anniversary Recognition feature appears in each edition of Tower Times in order to honor the companies who have been members of NATE for 15+ years.

The following companies first became members 15+ years ago during the months of May and June. Thank you for your loyalty and dedication to the Association!

Asbuilt Construction, Inc.
Carrick Contracting Corporation
Christensen & Griffith Construction Co.
Com Plus Inc.
D & H Builders, Inc.
F.C.I. Towers, Inc.

Honeywell Safety Products USA, Inc.
JemStar Construction
Novatec Braids Ltd.
Nsight Tower
Precision Communications, Inc.
Presco Telecommunications, Inc.
Radio Towers, Inc.
Radiofrequency Safety International (RSI)
SubCarrier Communications, Inc.
Tower King II, Inc.
Trylon TSF Inc.
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Elliott Equipment Company’s telescopic truck-mounted aerial work platforms increase your efficiency and are built for the long haul. We work with you to engineer an MVP for your most common job-site requirements, whether its special outriggers, custom toolbox and lighting, or productivity tools from our “Office in the Sky” package.

Elliott’s aerials reach up to 215’, eliminating the need to rent a self-propelled manlift, and our line features models up to 87’ working height that don’t require a CDL license.

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Having only one tower technician working at a tower site isn’t allowed anymore. I have no shame in admitting that is how tower service work was performed in our small tower service business when I was young 50 years ago in the Northern Plains states. Dad and I would put together a long list of hundreds of towers that needed to be worked on before we each came home on Friday night. A service pickup, full of large cardboard cases of beacon and obstruction lamps would keep me busy re-lamping and filling out our one page tower climbing inspection forms until we headed home every Friday night. My pup tent picketed at the next tower site each night gave me an earlier start than if I was in a motel. I could inspect and re-lamp up to 14 towers per 14 hour work day in the summers by myself.

I can clearly remember installing two-way antenna systems on 500’+ towers by myself since Dad and I were each too busy and hundreds of miles away from each other (with no cell phones). It went like this: rig the tower and climb back down; roll out serpentine the 7/8” coax out across the field; hoist up the antenna on its mounting bracket assembly, plus the coax, the overloaded tool bucket, your favorite cable come-along and all of the food and drink you need for the next several hours. Next, hoist everything in one lift with the mechanical PTO powered cathead to within a foot or two of where you need it mounted on the tower and then scamper back up the tower to begin sorting out and installing the mess you just sent up.

Dad and I always worked together as a two man crew whenever we had 10 bay ERI FM antennas with 3” coax to hang on thousand footers using our homemade hydraulic hoist. That being said, what can we offer the climbers of this century that they don’t have or haven’t been offered yet? Faster catheads, hand-held radio and cell phones with auto-deploying wings when dropped, unbreakable ropes, shorter towers, antennas that do not require feedlines, smarter hand-tools, automatic climbing gin poles, etc.

The most important feature we have nowadays is our Association which gives us the opportunity to be part of a professional team we never had decades ago.

Looking out for one another’s welfare and safety is a wonderful thing that not all recognize. Our NATE Committees are proactively working to ensure that all safety aspects of the wireless workforce is taken into account when new technologies or methodologies are introduced.

Now I climb with fall protection systems 100% of the time and prove to myself that it is easily possible to work and be safe from being an untethered fall. Imagine driving to your next tower climbing job at a remote tower site, alone, nobody knows where you are nor will they until you show up missing several days from now. That will never happen again. You are now part of a large worldwide wireless worker team who looks out for you, whether you realize it or not.

NATE seeks everyone’s input on every digital platform as to the needs of our wireless worker. When a technician retires from a lifetime of tower and antenna work, there should be only good memories of making a nice living.

We all have a long way to grow in the next hundred years and with our member’s ideas and leadership, we will continue to be the world’s leading wireless tower association.

Kevin Reski is a member of the NATE Member Services Committee and President and Owner of Great Plains Towers in West Fargo, North Dakota. He can be reached at 701-282-2236 or kreski@greatplainstowers.com.
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Members may also complete your renewal form and mail it, along with payment, by June 30, 2019 to:

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Electrical hazards multiply for workers involved in cleanup and recovery efforts following major disasters and weather emergencies. Life-threatening danger exists around downed and low-hanging electrical wires which can still be energized following a storm.

Safety First

Always consider all electrical equipment, lines and conductors to be energized. If you notice downed wires or damaged electrical equipment, contact appropriate utility personnel if you can. Circuits do not always turn off when a power line falls into a tree or onto the ground. Reloaders automatically try to reset circuits and restore power when it is interrupted. Even if electric lines are not sparking or humming, fallen electric lines can electrocute you if you touch them or the ground nearby.

Energy

Downed wires can energize other nearby objects, such as fences, water pipes, bushes and trees, buildings, and telephone/CATV/fiber optic cables. Even manhole castings and reinforcement bars (rebar) in pavement can become energized by downed wires. During storms, wind-blown objects such as canopies, aluminum roofs, siding, and sheds can also be energized by downed wires.

Backfeed

The improper connection of portable generators to a building’s electrical system is one way hazardous backfeed conditions are created! Backfeed is a hazardous condition created when temporary sources of electricity (such as a generator) are connected to the damaged permanent system causing electricity to flow inside and outside a structure through connected lines and equipment. In emergency conditions, portable generators should only be used as standalone sources of power, and (except for properly wired by-pass or isolation connections) not connected to a building’s electrical system. If a generator is connected to a building’s electrical system, it must be done with a properly installed main breaker bypass to prevent electricity from flowing out of the building and into downed power lines.

Some other sources of backfeed include:

- Circuit ties/switch points
- Lightning
- Downstream events

Always ensure that proper lockout/tagout procedures are followed to avoid connecting two electrical sources to the same circuit.

Rules to Live By

- Do not assume that a downed power line is safe simply because it is on the ground or it is not sparking.
- Do not assume that any wire is a harmless telephone, television, or fiber-optic cable, and does not carry lethal current.
- Treat everything electrical as energized until tested and proven to be de-energized.
- Never go near a downed or fallen electric power line.
- Electricity can spread outward through the ground in a circular shape from the point of contact. As you move away from the center, large differences in voltages can be created.
- Never drive over downed power lines. Assume that they are energized.
- If contact is made with an energized power line while you are in a vehicle, remain calm and do not get out unless the vehicle is on fire. If possible, call for help.

For more information visit [www.osha.gov](http://www.osha.gov).
If you must exit any equipment because of fire or other safety reasons, try to jump completely clear, making sure that you do not touch the equipment and the ground at the same time. Land with both feet together and shuffle away in small steps to minimize the path of electric current and avoid electrical shock. Be careful to maintain your balance.

Workers’ Rights

Workers have the right to:

- Working conditions that do not pose a risk of serious harm.
- Receive information and training (in a language and vocabulary the worker understands) about workplace hazards, methods to prevent them, and the OSHA standards that apply to their workplace.
- Review records of work-related injuries and illnesses.
- File a complaint asking OSHA to inspect their workplace if they believe there is a serious hazard or that their employer is not following OSHA’s rules. OSHA will keep all identities confidential.
- Exercise their rights under the law without retaliation, including reporting an injury or raising health and safety concerns with their employer or OSHA. If a worker has been retaliated against for using their rights, they must file a complaint with OSHA as soon as possible, but no later than 30 days.

For additional information, see OSHA’s Workers page (www.osha.gov/workers).

How to Contact OSHA

Under the Occupational Safety and Health Act of 1970, employers are responsible for providing safe and healthful workplaces for their employees. OSHA’s role is to ensure these conditions for America’s working men and women by setting and enforcing standards, and providing training, education and assistance. For more information, visit www.osha.gov or call OSHA at 1-800-321-OSHA (6742), TTY 1-877-889-5627.
The Operator Seeks Efficiency and Cost Reduction Through Renewable Energy Investment and Infrastructure Sharing

Reducing energy consumption is one of the main corporate priorities for Claro in Brazil and the company has started an ambitious auto generation initiative to reduce its operational cost and improve efficiencies. The operator has already developed nine green energy plants to power its operations and when the initiative is completed, 80% of its total energy consumed will be sustainably auto-generated by the MNO. TowerXchange has spoken with João Pedro Correia Neves, Director of Financial Support to find out about the project’s details and discuss Claro’s infrastructure strategy in the country.

TowerXchange: João Pedro, could you please introduce your role at Claro Brasil?

João Pedro Correia Neves, Director of Financial Support, Claro Brasil:

My role consists of offering financial support to our technical operations, marketing and customer care as well as managing payments for our infrastructure fees. Additionally, I deal with our infrastructure vendors and providers and manage the company’s infrastructure assets.

My main goal is to improve efficiency across all company processes through simplification and automation. Moreover, the company is strongly committed to implementing digital solutions in our infrastructure in order to optimise our resources and improve sustainability. Our department is playing a key role overseeing the implementation of this initiative.

Specifically, we aim to improve our towers’ efficiency, reduce our energy cost and minimise our rental fees. We are implementing a digital initiative in our sites that aligns with those corporate goals.

TowerXchange: How many towers does Claro operate in Brazil and what is the company infrastructure strategy?

João Pedro Correia Neves, Director of Financial Support, Claro Brasil:

At the moment we have around 14,000 active sites and our priority is to improve the profitability of those assets.

During 2019, we will continue to build new sites but the current priority is to reduce the operating cost of the towers and facilitate access to other operators in order to increase revenue. We are trying to develop and implement a simple process within the company that will allow other MNOs to access our sites. We are promoting communication with other operators in the market and exploring collaboration possibilities and potential synergies to optimise the use of technical solutions and minimise the costs associated with the maintenance and operation of our infrastructure.

Regarding towercos, we have a very good relationship with them and we will continue to use their infrastructure.

TowerXchange: What are the main challenges that the company is facing when deploying and maintaining its infrastructure in the country?

João Pedro Correia Neves, Director of Financial Support, Claro Brasil:

Author: Pablo Crespo, Head of Research, Americas & Asia, TowerXchange
The main challenges are related to energy cost and security, two variables that have historically been big issues for the Brazilian telecom industry.

In order to reduce energy consumption, we are developing a project for our low voltage sites and we have already started the construction of our own power plants that allow us to auto generate and meet the necessary demand of those sites. Additionally, for medium voltage and bigger capacity sites, we are exploring all the energy purchase options in the free market and we are also betting on renewable energy.

On the other hand, we are working closely with all the company technical areas and developing different efficiency initiatives. On this note, consumption control is key and we are using telemetry to monitor it. We are also implementing several analytic and comparison tools to determine what would be the ideal consumption in each site and observe which specific aspects can be improved in each tower to reduce that energy cost.

Regarding security, we have a specific department that deals with that and we work very closely with them. As it happens in most Latin American markets, we suffer from vandalism and theft, which is a big issue for the company. We are using modern access control and surveillance systems that guarantee theft reduction and allow us to efficiently control and monitor our assets.

Claro Brasil’s various auto-generation projects

<table>
<thead>
<tr>
<th>Name</th>
<th>Power</th>
<th>Measure</th>
<th>City</th>
<th>State</th>
</tr>
</thead>
<tbody>
<tr>
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<td>5</td>
<td>MWp</td>
<td>Várzea da Palma</td>
<td>Minas Gerais</td>
</tr>
<tr>
<td>Usina Solar Buritizeiro</td>
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<td>MWp</td>
<td>Buritizeiro</td>
<td></td>
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<tr>
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<td>MWp</td>
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<td>MWp</td>
<td>Buritizeiro</td>
<td></td>
</tr>
<tr>
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<td>0.66</td>
<td>MWp</td>
<td>Ponta Porã</td>
<td>Mato Grosso do Sul</td>
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<tr>
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<td>1.6</td>
<td>MWp</td>
<td>Itarapina</td>
<td>São Paulo</td>
</tr>
</tbody>
</table>

By the end of the project, 80% of the total of Claro’s energy consumption in the country will be generated and managed by the company.

TowerXchange: On top of tower deployment, is Claro considering new solutions and technologies such as small cells, DAS, fibre and other alternatives?

João Pedro Correia Neves, Director of Financial Support, Claro Brasil:

Fiber is already a pivotal element for us to increase capacity and is playing a key role in both the company’s current and future growth plans. We are probably the operator with the largest fiber investment and portfolio in the country and we are now connecting all our towers.

We are also open to explore all those technologies and solutions and our investments are always driven to deliver the best solutions and offer an efficient telecom network to our customers.
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It seems everywhere you look a key topic of conversation is how to fill open positions! From entry-level tower technicians to experienced project managers there are vacancies abound. NATE has established a Workforce Development Group focused on growing the industry’s workforce.

With FirstNet, rural broadband, broadcast repack, and the rollout of 5G, there is a shortage of workers. This is affecting NATE members and many have been forced to turn down contracts because of it.

Finding workers that want to work at heights and travel is a challenge. Another obstacle is potential employees don’t know about telecom. When you ask someone what they want to be when they grow up, it’s not usually a tower climber or in the telecom field.

The Workforce Development Group has formed two sub-working groups.

- Outreach and Promotions
- Core Standards

The goal of the Outreach and Promotions Sub-working Group is to research different outreach and promotional opportunities and supply this list to NATE members. From job fairs to increasing awareness of telecom careers, this group will focus on getting the word out to raise awareness of our industry as a career option.

The Core Standard Sub-working Group is tasked with developing a “core” standard of education for tower climber development. These ‘core’ trainings will tie into TIRAP and follow the NWSA standards for Tower Tech advancement. The goal is to have industry input on what technicians need to enter the workforce in an effort to enable standardization of educational pathways.

To meet the need for trained workers, NATE supported the Communications Jobs Training Act, which was reintroduced in the U.S. House of Representatives on March 21, 2019. The bill would provide $20 million a year for three years. The objective is to provide competitive grant funding to develop and administer training for communications tower service, construction, and maintenance through the development of curriculum-based programs for community colleges and vocational and technical schools.

With unemployment rates of less than 4%, competition for talent is tough. Telecom is a little known career option with vast potential. NATE is coming together for its members to address and meet workforce demands.

Miranda Allen is a member of the Workforce Development Group, a member of the NATE Member Services Committee and the CEO for Radiofrequency Safety International (RSI) in Kiowa, Kansas. She can be reached at 888-830-5648 or mirandaw@rsicorp.com.
Preparation for What Comes Next After the Sale of Your Business

Where you are today is the result of your passion for the business that you have built and a lifetime of work. What is your vision for life after you walk away from your business? What you do next is critical for you and your family. It is a time when you need to shift your focus to personal fulfillment, wealth planning, and more.

You. Your Family. Your Employees.

Your business goes to the heart of who you are and what you do. Even for family members, your decision to sell your business may represent a significant change in wealth and status. Some owners have a clear separation between family and their business. However, communicating with those who could benefit the most may be important to a successful plan.

Many owners assure employees that a sale will have no practical impact on them. However, once the sale has gone through and you are no longer involved in the decisions, it can be hard to know. This may mean a period of tension and uncertainty -- which can have an emotional impact on you.

Here is what we heard from business owners:

“It’s sad and hard when you sell because you’ve not only invested time and money, but also a bit of your soul.”

“A part of me was delighted but another part of me was sad. The office was like a second home.”

Prepare for Your Exit

In the February 2018 issue of UBS Investor Watch, we found that 48% of business owners do not have a formal exit strategy in place. Here are three key tips for getting started.

1. Plan Ahead
   Long-term planning is key to any successful sale; because it helps you focus on what is important. Starting planning conversations early with your financial advisor, tax professional, and estate-planning attorney will help you be confident about your future. Be certain that advanced income, legacy, and tax planning are a part of these conversations.

2. Define What You Want
   Spend time thinking about what you want after the sale. Reflect on your passions and plan for what you want to accomplish. UBS Investor Watch research found that 48% of business owners look forward to traveling more, while 26% plan to give back to their community or causes.

3. Break the Silence
   UBS Investor Watch research shows that only about 25% of former business owners engaged their children and heirs in a conversation about family wealth. Communicate early about what you expect or hope for. This creates a clearer picture and gives everyone involved a chance to contribute.

The Power of Emotions

Selling your business is about letting go. This can be a profound change with powerful emotional impacts. For some owners, it is confusing. For others, there is a sense of elation. Many talk about feelings of depres-
sion and a lack of purpose.

Here is what we heard from business owners:

“I felt very muted. I did not know how to process it. I had to figure out how to deal with a new reality.”

“I had been working hard for a long time. At the beginning, I did nothing, and it was great. People say you get bored, but I didn’t -- it was wonderful.”

Planning for Life After the Sale: the Six Stages

As business owners contemplate a transition, they wonder what life will look like after the sale. We’ve identified six stages that most owners go through. Think through these questions well before your transition.

1. Recharge
   - Is a vacation or dream purchase needed? Do you need some space to think? Is an escape and recharge needed?

2. Self
   - How much money do you have and need? Is your wealth life changing or life enhancing?

3. Enabling
   - What professional advice do you need? Do you have the right advisory team?

4. Family
   - How should you support your family? Should you set money aside for home purchases and education?

5. Legacy
   - What do you want to leave for future generations and your employees? How should it be left?

6. Opportunity
   - How do you find personal fulfillment in the future? How can you best contribute to others?

Whether your transition is a few months or a few years away, it is important to start planning for how you want to live your life after selling your business.

Source: UBS Business Owner Insights Report, Preparing for what comes next: life after the sale of your business, November 2018

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NATE FEATURED SAFETY & EDUCATIONAL MATERIAL

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

The NATE Tower Climber Fall Protection Training Standard (NATE CTS) establishes the minimum requirements to which all tower climbers should be trained. The NATE CTS outlines the individual standards for varying levels of tower climber expertise: Authorized Climber, Authorized Rescuer, Competent Climber and Competent Rescuer. The document also contains a Course Training Plan to demonstrate how to implement and utilize the NATE CTS and includes a comprehensive Definitions section. This edition is available online as a free resource for member companies in the Member Login section of the NATE website. The Spanish edition is also available for purchase in print format for both members and non-members.

NOTE: Non-members can purchase the NATE CTS for $200.00

Please visit www.natehome.com or call 888-882-5865 (U.S.) for more information.

$50.00
NATE Congratulates the Graduates of the Advanced Rigging Principles Courses that were Recently Hosted by the Association

Advanced Rigging Principles Course Graduates
Buffalo, New York | March 4, 2019

Advanced Rigging Principles Course Graduates
Tustin, California | March 22, 2019

Disclaimer
This material was produced under a 2018 Susan Harwood Training Grant (SH-05018-SH8) from the Occupational Safety and Health Administration (OSHA), U.S. Department of Labor. It does not necessarily reflect the views or policies of the U.S. Department of Labor, nor does the mention of trade names, commercial products, or organizations imply endorsement by the U.S. Government.
What To Do in Case of An Accident

Even companies with the best safety records know they need to be prepared and have a well-developed plan of action to follow should the unlikely event of a serious, or even catastrophic, accident occur.

Being prepared means having immediate access to the necessary support to ensure that the best possible care is readily available, it also means making certain that all parties in the company know what to do and when it should be done.

It is important to read and understand the laws that are in place regarding accident reporting and the availability of medical services and first aid. These regulations include CFR 1904.3 “OSHA Reporting,” and CFR 1926.50 “Medical Services and First Aid.”

To assist NATE members with developing their own accident contingency plans, the NATE Board of Directors and Safety & Education Committee have developed the following list of suggestions. This list is not intended to be an exhaustive compilation of all possible actions, but is intended to act as a guideline for member companies to develop their own plan of action. The items below are not presented in any particular order.

Emergency Checklist

1. Check the injured individual(s) immediately and assess his/her condition. Apply first aid, if necessary.

2. Call the nearest Emergency Medical Services (EMS), if necessary. As per your company safety program, make certain that all crew members are capable of giving clear directions to the site, and that all crew members have easy access to the EMS phone number. Site directions and the EMS phone number must be easily and readily accessible to all crew members.

3. After calling the EMS, phone the home office and give them as much detail as time allows. An office representative will fill out the required forms.

4. Secure the site so that nothing related to the accident is moved by anyone until the investigation is complete.

5. Before the EMS leaves, be sure that you have their company name and know where they are taking the injured individual(s).

6. The home office should appoint a temporary spokesperson. Only the spokesperson is allowed to make any statements.

7. OSHA and police officials have the authority to question witnesses. Refer to your company policy for guidance. If the police do not arrive to secure the site, then a company representative should remain there.

8. Take pictures of the accident site as soon as possible following the accident, making certain to include any equipment involved, the perimeter and entrance facing the accident scene, and close up pictures of any important items.

9. Office personnel will contact the families of the individual(s) involved in the accident when they have enough information to pass along. How to tell loved ones is a delicate situation, and, if deemed appropriate, clergy may be preferred. Under no circumstances should employees contact family members of other employees.

10. Office personnel must advise the insurance carrier of the accident. This will enable the insurance company to begin its own investigation procedures.

11. The office needs to determine who is going to conduct the company’s investigation and if that person is not on site, then they need to be mobilized immediately.

12. The office needs to develop a file on the accident containing all photos taken at the accident scene, copies of all witness reports, copies of all initial written documents, copies of all files concerning personnel at the accident site, copies of all information used on the site, and copies of all contracts, job orders, and correspondence concerning the site.

13. The customer, tower owner, and landowner may need to be contacted per your company policy and/or contract. A company representative should interview witnesses and involved personnel and gather all relevant information.

14. If OSHA conducts interviews, the company representative must obtain permission from the employees to be in attendance (this may vary from state to state, so check with your attorney). Employees may be asked to sign a statement and/or note taken by an OSHA representative. Advise your employees that they are under no obligation to sign anything. If, however, they do choose to sign, then encourage them to review their statement carefully, and remind them that they are entitled to ask for a copy. Additionally, if the employee so chooses, he or she may provide a copy to their employer.

15. No work should be continued until all necessary information has been gathered, and the safety of the work site confirmed.

16. A company may provide counseling before returning to work.

PLEASE NOTE: NATE maintains a list of law firms who have experience involving a wide variety of tower industry and labor related issues. In addition to assisting with issues that arise in the day-to-day operations of the Association, these firms are available for hire by member companies as industry-related and company specific legal concerns arise. Please contact the NATE office at 605-882-5865 or nate@natehome.com to receive a listing of these law firms.
As a benefit to members, NATE offers an online “Marketplace” as an avenue for members to buy and sell used equipment. Although anyone is allowed to view the online classified ads, only NATE members may post an ad. This online “Marketplace” is available for members to place an ad at no charge.

Rules and Regulations

- Only NATE members are allowed to place an ad.
- Ads are limited to 40 words. Ads submitted with more than 40 words will be rejected.
- This marketplace is for buying and selling used equipment only.
- It is the advertiser’s responsibility to notify the NATE office when their equipment sells or they have found the used equipment requested and they want their ad removed from the marketplace.
- Please allow 3 to 5 working days for your ad to be posted.
- Ads may be placed online on the NATE website at: www.natehome.com or by emailing towertimes@natehome.com.
- All ad submittals must include a contact name, company name, street address, email address and phone number.
- NATE reserves the right to reject any ad for any reason.

Save the Date

Tuesday, October 22, 2019
during Mobile World Congress Americas in Los Angeles
4PM – 6PM PDT
Tom’s Urban at LA Live
Registration Opens Tuesday, April 23

NATE and RWA members will converge at the trendy Tom’s Urban at L.A. LIVE to network with rural wireless and infrastructure company executives, FCC Commissioners, staff and other distinguished industry VIPs, and make connections from coast to coast. Guests will enjoy appetizers and an open bar throughout the main level and two street-side patios.

For questions about the event or sponsorship opportunities, please contact your member organization at the email or phone number provided below:

NATE Contact:
Nikki Gronau, NATE Resource Manager
nikki@natehome.com
Tel: 605-882-5865

RWA Contact:
Michele Giroux, RWA Chief Administrative Officer
mgiroux@ruralwireless.org
Tel: 202-551-0025
50+ years of experience all in one place.

Thousands of successful projects for all the major carriers mean Newkirk Electric has the experience to back up their high quality service and safety record. In-house civil, electrical, and tower crews mean no guessing when it comes to efficiency. Fully trained crews equipped with the latest PIM, RF and sweep testing equipment mean no waiting to finish the site. Choosing Newkirk Electric means you get a team of dedicated professionals—all devoted to your project’s success.

For more information email wireless@newkirk-electric.com or call 231-722-1691.
**Avoiding Electrical Shocks**

**Electrical hazards can be found in all industries.**

Avoiding electrical shocks both at home and at work requires awareness of the hazards and a respect for this “Silent Killer.” The human body has a low resistance to electricity, making it a good conductor, like most metals. Unlike metals however, the human body does not respond well when electricity passes through it.

Physical results include thermal burns, disruption of normal heart activity, severe muscle contractions, and even death.

The most common and serious electrical injuries occur when electrical current flows between the hands and feet. This happens when a person touches an energized line. The electrical energy is looking for the shortest path to the ground, and it will pass through the body to the feet to reach it. When this occurs, a person's heart and lungs are frequently damaged by the electrical energy.

Placing an insulator between the energy and the point of physical contact is one method of protection. Porcelain, rubber, pottery and dry wood offer substantial resistance to the flow of electricity, and are therefore good insulators. These materials can often protect a person from electrical shock.

Precautions for avoiding electrical shocks include, but are not limited to, the following:

- Always make sure electric tools are properly grounded or double insulated. The double insulated tool must have an undamaged outer case and be clearly labeled as “double insulated” by the manufacturer.

- Always check to be sure the grounding system is complete. Unless they are designated as double insulated, grounded power tools must be attached to a grounded service circuit. If there is any doubt about the grounding, test it! (Ground testers are inexpensive.)

- Use heavy duty grounded extension cords. These cords have two layers of insulation, with reinforcement between the layers. They are less susceptible to damage than house-hold type cords. To check if the cord is heavy duty, check its shape. Most flat cords are not heavy duty. Heavy duty cords will have a marking on the insulation such as: “S”, “SJ”, “SJO”, etc.

- Avoid mixing water and electricity! Not only keep cords, tools and working/walking surfaces dry, keep your hands and feet dry as well. The electrical resistance of wet skin is at least 100 times less than dry skin. Wet skin greatly increases the likelihood of severe shock if a person comes in contact with a live circuit. If you must work around water, connect to a Ground Fault Circuit Interrupter (GFCI) to automatically shut off the current if there is an abnormal current flow.

- Never work on or around a live electrical circuit. Lock Out the power so that only you have control over energizing the machine or equipment. Don’t take chances.

Remember, electricity strikes without warning—always play it safe!

For more information: [www.toolboxtopics.com](http://www.toolboxtopics.com)
**View from the Top**

**Name** – Benito Bandu Jr.
**Hometown** – Houston, Texas
**Age** – 60

- **How long have you worked in the tower industry?**
  39 years.

- **What is your favorite part of the job?**
  Safety.

- **Why did you choose a career in this industry?**
  Get to see the world.

- **What type of work do you perform?**
  Safety.

- **What is the most rewarding part of your job?**
  Traveling!

- **What challenges do you face?**
  Making sure everyone does things the right way with no short cuts.

- **Do you have a safety tip to share?**
  Stay sharp, be sharp.

- **What would you like people to know about being a tower technician?**
  Safety begins with ME!

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**Name** – Paul Elam
**Hometown** – Sequin, Texas
**Age** – 28

- **How long have you worked in the tower industry?**
  2 1/2 years.

- **What is your favorite part of the job?**
  Travel.

- **Why did you choose a career in this industry?**
  Needed to get outside.

- **What type of work do you perform?**
  Lighting.

- **What is your most memorable view or experience?**
  Best view was in El Paso on an install, could see Texas, New Mexico and Mexico all at once.

- **What is the most rewarding part of your job?**
  The freedom.

- **What challenges do you face?**
  Eating healthy on the road.

- **Do you have a safety tip to share?**
  Keep it 100% tied-off!

- **What would you like people to know about being a tower technician?**
  It is hard work but worth it.
FieldSENSE 2.0

The FieldSENSE 2.0 is the next generation of Personal RF Monitors specifically designed to protect personnel working near broadcast and telecommunications transmitting antennas from EMF overexposure.

Advanced Features
+ Increased frequency range: 50 MHz - 6 GHz
+ Measure E & H fields
+ Shaped response
+ Isotropic
+ Data logging
+ Fall detection alarm
+ Straps to harness
+ All weather design
+ Rugged IP64 enclosure
+ Bright and visible LED lights
+ Voice recorder for hands-free notes
+ Long lasting battery life (AAA batteries)

Available through the following retailers:

fieldsense.com
WHY DO YOU CLimb?

"After being in this industry for several years, it's great to take time to look back on where I've been and where I am now. Some days go faster than others, but when I stop to think about the views I've seen and the people I've worked with, that's what makes it all worth it."

- #RealTowerClimber