

# Tower Climbing: Why “The Most Dangerous Job in America” Has Gotten Safer

**T**he head of the Occupational Safety and Health Administration (OSHA) once called tower climbing “the most dangerous job in America,” and for good reason. It’s been estimated that tower climbers—typically subcontractors—have an on-the-job death rate nearly 10 times that of other construction workers.

What makes tower climbing so dangerous? Workers scale towers to perform inspections and tests, handle repairs, and install equipment ranging from antennas, amplifiers, and fiber optic cable to lighting systems. Aside from the fact that their work takes place hundreds of feet off the ground, tower climbers must also haul, up and down a tower, all the tools and equipment needed to perform their job. As one might imagine, the more wrangling a climber must do with equipment—especially free climbing, i.e., working without fall protection gear—the greater the risk of a fall.

After 2006, when 19 tower climbers died, OSHA briefly partnered with the National Association of Tower Erectors (NATE) to encourage heightened awareness of dangers and safety issues. Although the partnership dissolved in 2009, a heightened focus on tower-climber safety has remained throughout the industry.

Where are we today? In 2012, there was only one industry fatality. Yet in 2013, there were 14 deaths, and 10 deaths in 2014. What’s going on? Are we backsliding on safety and heading in the wrong direction? Far from it. Numbers rarely tell the whole story. This article explores why tower climbers today are safer than ever before and takes a glimpse into what the future holds for this quickly populating industry.

## Exploding Growth

In 2006 when the 19 deaths occurred, there were approximately 10,000 tower climbers in America. Fast-forward to today, and there are more than 29,000 climbers across the nation. Comparing fatalities from 2006 to 2015, this represents a 290 percent increase in workers, with an almost 80 percent comparative *decrease* in deaths.

Simply put, more people in the air will always mean there’s more risk of injury or death. Yet, the fact that there have been comparatively fewer injuries as the number of workers on elevated structures has grown exponentially means more attention is being paid to safety, both on the ground and in the air. This is good news for everyone.

## Leading the Charge on Safety

How did this emphasis on safety come about? It would be nice to say everyone veered altruistic and banded together to save lives, but the reality is that litigation played a substantial role in bringing about change. Before 2012, cell phone and tower carriers were more or less isolated from charges of liability, with the burden falling on the subcontracting companies who provided the workers. After the 2006 partnership with NATE, OSHA began tagging these cell phone and tower companies in lawsuits. At the same time, a number of associations offering safety training and safety certifications began to appear across the nation. For example, NATE unveiled the NATE STAR Initiative that rewards participants (tower companies) who adhere to requisite levels of safety, training, accountability, and reliability. In addition, the NATE Tower Climber Fall Protection Training Standard (NATE CTS) put forth minimum standards to which tower climbers should be trained for Authorized Climber, Competent Climber, and Competent Rescuer certifications. As a result, every major customer—and even most smaller power companies—now make it a requirement that only documented, certified climbers be permitted on the jobsite.

## 100% Tie-Off Initiative

In 2014, the Wireless Industry Safety Task Force introduced the 100% Tie-Off Awareness 24/7 Campaign. While the ideal of 100 percent tie-off has been around for years, enforcement in the past was lax. The recent campaign has pushed the fact that 100%



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Tie-Off is the law and must be adhered to at all times by any and all personnel working on a tower site.

Fred Teichman, director for the central region of Tower 16, a subsidiary company of S&N Communications, said that workers who have been climbing towers for years often resist efforts to tie-off 100 percent of the time.

“Call them old salty dogs,” Teichman said. “They’ve been free climbing for years, and they may feel like it’s more work to have to tie-off every time they move. It’s kind of like when seatbelt laws came into play. People who had been driving for years without them resisted, even though every study shows that you’re safer using them. These guys are the same way. They’ve been doing their job just fine for years without being tied off, so in their minds, why make more work for themselves? It then becomes a leadership challenge to convert them to a safety-first mindset. Barring that, companies just have to have people on-site to ensure 100% Tie-Off is being enforced.”

Teichman carries a half-dollar sized coin in his pocket stamped with the words “100% Tie-Off.” He uses the coin as a reminder of the commitment that he, his company, and his workers have made to safety.

### A few tips to make your workers and sites safer:

- Conduct announced and unannounced site visits/safety inspections.
- Look at more than just tie-off. A safety inspection should run the gamut, from hardhats and safety glasses to easy access to paperwork proving worker certifications.
- Encourage partnership among field workers. Emphasize during site visits that your goal is to make sure everyone is compliant, not to find fault and point fingers.
- Institute a safety award program and reward those who practice safety and have the courage to call out unsafe practices to management.
- Offer small bonuses or rewards for employees who go above and beyond in their safety certifications.
- Offer safety tips at staff meetings, in newsletters, through e-mails, etc.

“We’re the hands-on people who are doing the work up there,” he said. “And make no mistake—it is dangerous work. I show climbers this coin and remind them that it’s because of our adherence to safety that we get to come home at night.”

## Better Towers, Better Equipment, Better Safety

Today’s climbing equipment is much more functional than in years past. “Tower climbing equipment was originally used just to carry tools or secure climbers at a certain point where they were working,” said Teichman, who has 30 years in the industry. “Today’s equipment has changed. It’s designed to allow you to carry tools and still be 100 percent tied off. It secures workers so they can climb and work with both hands.” In other words, no matter if a worker is climbing, stationary, or moving into position, he or she is always secured.

Towers themselves have improved. Almost all towers across industries have been upgraded with a safety-climb device (a steel cable that runs from the bottom to the top of a tower). The safety climb cable allows for climbers to be tied off 100 percent of the time. For the few towers that don’t offer the cable, 100% Tie-Off is still an option; it just requires securing a safety line that workers manually clip on and clip off.

## Behind Closed Doors: The Boardroom

Prior studies—not to mention common sense—show that injuries and fatalities in the past were related to workers taking shortcuts to meet tight deadlines and goals. If climbers were working for a company that didn’t emphasize safety, there was a danger in speaking up or in being “that guy” who slowed production because he insisted on clipping in and out.

These shortcuts and fatalities can’t be laid solely at the feet of workers. Management must bear the burden of responsibility for allowing—and even pushing—workers to operate under unsafe conditions. Thankfully, with compliance laws, management across industries are now proactive in not only encouraging, but demanding workers adhere to the highest levels of safety.

At S&N, safety has always been at the forefront of what we do. Long before certifications were mandated, we were holding training classes, shadowing programs, and enforcing tie-offs among workers.

Whether then or now, training doesn't come cheap. It can cost \$1,600 for tower training for a single employee and upwards of \$5,000 to "train the trainer." But when you consider that the majority of all tower-climbing fatalities in the past were directly related to free climbing, management's role in enforcing safety standards becomes clear.

## What the Future Holds


"Over the years, the requirement of having only certified climbers has raised dramatically, which means the need for certification and documentation has escalated," Teichman said. He offered the example that if he hires a new technician who was trained only months ago by another company, that worker immediately gets slotted into a timetable for when he or she must be recertified by Tower 16 in order to remain current.

"We're seeing progress every day with standards and certifications," Teichman said. "That's only going to keep growing."

He also said that as the "salty dogs" age out of the industry, workers who have never known anything except the current safety standards are replacing them. "I think the industry as a whole has moved from this kind of 'get it done' cowboy mentality to much more of a tower-technician mindset," he said. "The industry is coming together and agreeing to standards, making it much easier for workers who may change jobs to know that what they learned in one company will apply at another."

Helping ease the way for subcontractors to enforce standards is the fact that end customers—utility and

cell phone companies—are insisting on safety standards and compliance and refusing to work with companies with poor safety records. This is a good thing. Safety is never the sole responsibility of a worker or a company. Instead, it's the prerogative of an industry.

Tower climbing is still dangerous. But thanks to new industry standards, it's gotten much, much safer. 

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