

Vol. 10 No. 8

USA \$4.95

PRSRT STD

U.S. Postage PAID Pierre, S. Dak Permit #123

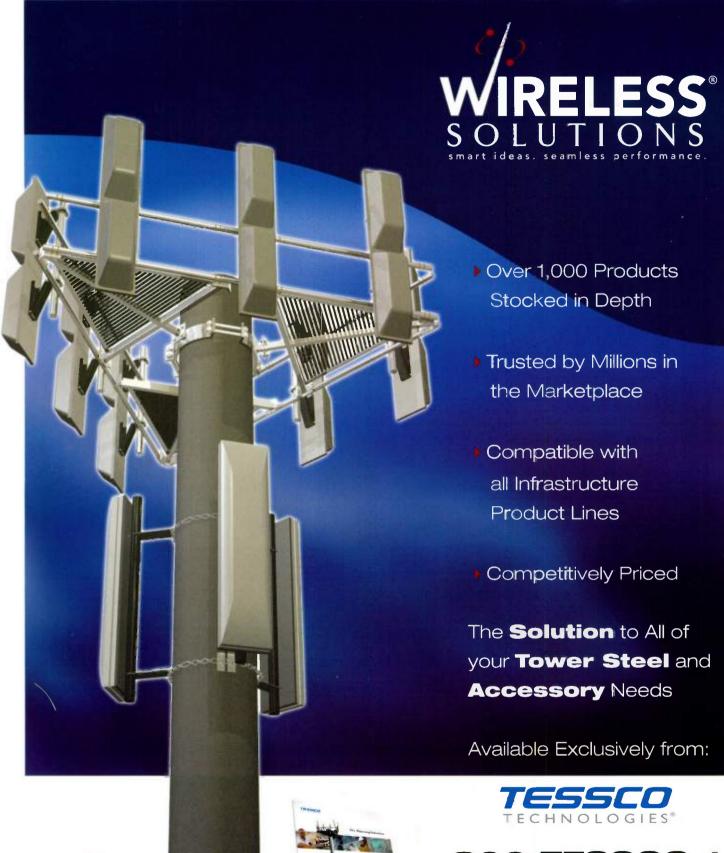


A preview of NATE's 10th Annual Conference & Exposition including current sponsors and exhibitors.

PAGES 25 - 31

"PROVIDING A UNIFIED VOICE FOR TOWER ERECTION, SERVICE AND MAINTENANCE COMPANIES"

World Radio History





800-TESSCO-1

www.tessco.com/go/ws-infra

Request Your TESSCO® Site Planning Solutions Guide Today!



FEATURES

Now is the time for

sponsors to sign up

exhibitors and

for NATE 2005.

- **NATE Board of Directors Candidates**Candidates have until September 1, 2004 to submit their candidacy statement and application.
- 9 Board of Directors Election Procedures/Application NATE Voting Members will be electing four individuals to the Board of Directors in November.
- 12 Checklist for Evaluating Qualified Contractors
 The NATE Qualified Contractors
 Evaluation Checklist was designed as a tool to help carriers evaluate a contractor's dedication to safety.
- In Challenging Times,
 Service Matters Most
 In difficult economic times, some businesses cut costs by cutting corners on customer service. This is exactly the



- Getting Your Finances in Order After the Loss of a Spouse While losing someone you love is obviously emotionally difficult, the loss of a spouse may have substantial impact on your financial situation as well.
- Federal Court Expands Employer Liability for State Safety Retaliation Lawsuits

 The Occupational Safety and Health Act prohibits retaliation (such as discharge or discrimination) against an employee who exercises rights protected under the
- NATE Corporate Collection
 As requested by NATE members during the 9th Annual Conference & Exposition held in Nashville, new items have been added to the NATE Corporate Collection.

Act on behalf of himself or others.

- 41 How to Survive an OSHA Inspection
 As an employer, you know only too well that an OSHA compliance officer could arrive for an unannounced inspection at your company or work site at any time.
- Suspension Trauma/Orthostatic Intolerance
 Orthostatic intolerance may be experienced by workers using fall arrest systems.
 Following a fall, a worker may remain suspended in a harness. The sustained immobility may lead to a state of unconsciousness which may lead to death.
- Proper Tower Marking

 Tower marking must always be first an issue of human safety, not merely governmental rules and regulations. The cost of lamp replacement and aviation orange paint is insignificant compared to the tragedy of life lost due to an aircraft strike on a tower not properly marked.
- What to Do About "Near Misses"
 In real life there is a danger in brushing off accidents that do not hurt, harm, or damage. When these near misses happen we should immediately run the red warning flag up the pole.

Guyed Tower Under Construction
Photo courtesy of Sabre Communications Corporation • Sious Cits, Iowa



DEPART M E N

4 From the NATE Office

Chairman's Message

NATE Insurance Program

77 News Brief

33 FYI

38 Product Showcase

45 Washington Wire

53 www.natehome.com

54 Safety & Educational **Materials**

63 Members Online

66 Tailgate Safety Meeting **Topic**

67 How to do Business in Vermont

71 Classifieds

77 Membership Information

76 Advertiser Index

Trade Show

Safety & Education

Membership

OSHA Relations



Tower Times is published monthly by the National Association of Tower Erectors 8 Second Street SE, Watertown, South Dakota 57201-3624 Telephone 605-882-5865 or 884-882-5865. Fax: 605-886-5184. Postage paid at Pierre South Dakota. Single issue price is \$4.95. Subscription prices for one year, U.S. \$50.00. Canada and Mexico - \$75.00, all other nations - \$150.00

Editorial contributions will be handled with reasonable care. However, the publisher assumes no responsibility for the return of unsolicited photographs or manuscripts.

Send subscription inquiries and address changes to the above address.

Neither Tower Times, nor the National Association of Tower Erectors is responsible for any accidents of any kind that may occur from the use of published data or from recommendations by its writers. The opinions expressed herein are those of the authors and do not necessarily reflect the policy of Tower Times or the National Association of Tower Erectors

Reproduction of text and illustrations is not allowed without express written permission

National Association of Tower Erectors

8 Second Street SE Watertown, South Dakota 57201-3624

Tel: 605-882-5865 or 888-882-5865 Fax: 605-886-5184

Email: nate@natehome.com Website: www.natehome.com



Patrick Howey patricka

natehome.com



Paula Nurnberg paula@

natehome.com



Carol Coughlin carol@

natehome.com



Moldenhauer PROPERTY AND TOWNSHOP



Trego deba shelly (w) natehome.com



Corene **Iverson** ADMINISTRATIVE ASSISTANT



RESOURCE COMPRISION corene@

vickia natehome.com

Vicki

Dahl

NATE Administrative Staff

At Sabre we're not building clones...



We're building better lightweight guyed towers.

Our new lightweight guyed towers feature extra heavy tubular or solid round legs and flanged connections, making them capable of handling heavier loading and ice conditions at greater heights than a clone. Manufactured in ten foot sections and available with a 12" or 18" face, Sabre's versatile lightweight guyed towers can be used as a free-standing, rooftop or wall-bracketed tower. Pound for pound the best lightweight guyed tower in the industry, Sabre's lightweight guyed towers are competitively priced and in stock ready for delivery. Call Sabre today for a better built lightweight guyed tower.



From the NATE Office



s NATE makes its way toward our 10th anniversary, it is easy to outline the many impressive accomplishments of the Association. NATE's impact on federal regulations; the list of safety materials that have been assembled; and the continued success of the NATE annual conference and exposition are all categories under which a long list of achievements can be included.

What we have accomplished is indicative of our success, but what we are doing now and our plans for the future are equally important standards by which NATE is measured.

When this issue of *Tower Times* is mailed to our members, NATE's leadership will be settling into another annual summer conference. The two-and-a-half days of meetings will be spent addressing the issues facing NATE's members, and how your association can best address those issues.

Unlike the annual conference and exposition where all NATE members gather for a week of educational sessions, receptions and the NATE trade show, the summer conference is time reserved specifically for NATE's Board of Directors, Committees and Administrative Staff to conduct business. I want to thank everyone who serves the Association in those capacities. Your dedication and hard work are reflected in the success NATE has experienced for the last decade.

Due to *Tower Times* being a monthly publication, the recap of the summer conference will appear in the October edition of the magazine. In that issue you will be able to read about the actions of the Board of Directors and each individual committee. I encourage you to follow those reports and call the NATE office with any questions you may have regarding the direction NATE is taking.

If there has been a common thread through my From the NATE Office articles this year, it has been how NATE has risen to a level of national prominence, allowing tower service companies to participate in the development of the rules that will affect their everyday operations. I encourage all NATE members to spread the word throughout the industry and encourage others to join your association. NATE is the reason tower erectors are involved in this process. Let's continue to ensure that our unified voice grows stronger. The issues we are facing today require that we all continue working together. TT

The NATE office headquarters is located in Watertown, South Dakota. The office staff is available Monday through Friday, 8:00 a.m. to 5:00 p.m. (Central Time) to assist members with the administrative business of the association. A toll-free number is available as a convenience for members to contact the office (888-882-5865). On page two you will find email addresses for each staff member.

Visit NATE Online

www.natehome.com

Board of Directors



Craig Snyder

Sioux Falls Tower & Communications
Stoux Falls, Smith Dakota
snyder@siouxfallstower.com



Don Doty

Doty-Moore Tower Services, Inc. Cedar Hill. Texas don.doty@stainlessinc.com



Terry Sharp, Jr.

Grant Tower, Inc.
Grant Michican
tsharp@granttower.com



Pat Cipov

Cipov Enterprises, Inc.
Sunter South Carolina
cipov@ftc-i.net



William H. Gathright, Sr.

DIRECTOR

Brook Hill Communications, Inc. Mechanicsville, Virginia ginpole@aol.com



Dave Anthony

DIRECTOR

Shenandoah Tower Service, LTD Statistica, Virginia davea@shensvc.com



John Hanna, Jr.

DIRECTOR

Tower and Communication Services, Inc. Florence, South Carelina JCBHA@aol.com



Ron Romano

DIRECTO

Installation Services, Inc.
General Illinois
rromano@installationservices.com



Jim Coleman

DIRECTOR

Southern Broadcast Services, Inc. Pallam Adama Incolemana southernbroadcastservices.com

Chairman's Message

hope you all had a nice 4th of July. With the war efforts in Iraq and Afghanistan, this past holiday seemed more meaningful while recollecting the great benefits of the freedom and independence we enjoy in this great nation.

It has been a busy summer for NATE. We have several irons in the fire right now, some of major importance that demand the constant attention of the staff and Board of Directors. I'll try to highlight a few in hope of keeping the membership up to speed and give a sense of how NATE is benefiting you.

Fall Protection Training Standard

The first draft of our new fall protection and rescue training standard was approved by the Climber Training Standard Committee a couple months ago. The draft looks very good and should be a great benefit to both in-house training of tower workers as well as to help standardize the way third party trainers approach tower fall protection training. We are presently drafting the exams that will go along with the training courses and then the draft standard. We hope to release this new standard to our members in the coming months.

North Carolina Tower Standard

The North Carolina Department of Labor is actively pursuing the implementation of a new communication tower standard. This will be the first of its type in any of the states or at a federal level. If the new rule passes through its process, it is likely to be duplicated in other states or at a federal level at some time in the future. Because of this, NATE has taken a very active approach working with North Carolina Department of Labor to ensure the standard is written in a fair and reasonable fashion.

ACSSH Tower Erection Work Group

NATE and several of its members hold positions on the ACSSH Tower Erection Work Group. This group is working on new draft language for a national tower erection standard. If the group meets their desired goal, the work they do will be used for future implementation of a national tower erection standard. This issue is of critical importance to our industry and the members of NATE and as such the NATE staff, Legislative and Regulatory Committee, Board of Directors and others are working hard to ensure our members are represented well with the officials and others in the work group.

Market Research

This year at our annual show it was determined that NATE needed to engage in market research to help the Board of Directors in setting the direction for the Association. We are presently working with a firm that will be assisting us in this effort. Some of you may be asked to take part in surveys or focus groups to share your opinions with this firm. We hope you will be helpful and open if so called upon. Once the data is gathered, we will use the information to implement improvements in the

Chairman's Message

services offered by NATE in hopes of bringing better benefit to its members.

Avian Mortality

Our representative in Washington, Jim Goldwater, has been busily engaged in representing NATE's position when it comes to avian mortality, or bird deaths, caused by towers. NATE has taken a strong position that further study is warranted before state or federal regulations are implemented restricting the construction and marking of towers. NATE is also working closely with CTIA, PCIA and NAB to ensure the best public interest is served on this issue.

These five issues, among the many other activities and services in which NATE is normally engaged, have made for a busy year. However, each has potential for huge positive or negative impact on our members and so the Board of Directors has felt it very important that we let none slide by without significant work by NATE.

Craig M. Snyder
NATE Chairman TT



The National Association of Tower Erectors is active in all facets of the tower industry and has become recognized as the leader in telecommunications and broadcast construction procedures and practices.

See pages 72-75 for Membership Information



Jeff Hall is a member

of the NATE
Trade Show
Subcommittee
and is the
Director of
Business
Development
for Hutton
Communications,
Inc. He can be
reached at
972-417-0503
or hallj@
huttoncom.com

OW! What a year so far. Back in February (this seems so long ago) at the 9th Annual NATE Conference & Exposition, the year was "kicked off" nicely with this exciting conference. Since then, things in the market are showing major signs of an upturn in business.

With this in mind, now is the time to start planning for NATE 2005, the Association's 10th annual conference and exposition, being held at the Wyndham Anatole in beautiful Dallas, Texas. Making the NATE conference and exposition a success for you and your company takes some preplanning on your part. Don't just show up and expect great things to happen for you and your company. The NATE Trade Show Committee works hard to insure that the "road is paved" for you to build on to have a successful event.

Take a moment to plan your experience at NATE.

- 1) Arrive early and attend as many of the educational sessions as you can;
- 2) Have a plan as to the exhibitors you need to see and what you need to talk with them about;
- 3) Spend time looking at the other exhibitors that you did not have in your plan, but you might find something (a product or service) that you did not know about or a new application for something that you did; and
- 4) Enjoy yourself and have a safe and fun time.

I would also like to take a moment and thank all of the past sponsors of NATE. Without them, the conference and exposition could not be the success that it is. I suggest that you take a look at the sponsor opportunities that are available and join in on the fun and excitement that comes along with the sponsorship. One of the big things about being a sponsor is recognition of your company amongst your peers in the industry. See pages 25-31 of this *Tower Times* for more information.

We are looking forward to another exciting NATE conference and exposition, and our 10th successful show.

Be Safe and we'll see ya'll in Texas!

TT



NATE Board of Directors Candidates

The NATE voting membership will elect four individual members to the NATE Board of Directors prior to the annual meeting in Dallas, Texas, February 14-17, 2005. The following position/background statements and photos were submitted by qualified candidates. The candidates are listed in alphabetical order. Candidates have until the September 1, 2004 deadline to submit their candidacy. Please see the NATE Board of Directors Election Procedures and Application on pages 9 and 10 for more information.



Don Doty
Vice President

Doty-Moore Tower Services, Inc. Cedar Hill, Texas

Tel: 215-631-1300 Email: don.doty@ stainlessinc.com NATE is going through a transformation from the formative years to reaching its stride in terms of growth, purpose and achievements. It is through this next phase of NATE's development that I see important opportunities to help guide our Board of Directors in meeting the needs and desires of the membership.

I remain dedicated to NATE and its founding principles. There are many troubling issues ahead on the horizon and I am prepared to tackle these challenges head on. I support professionalism, continued expansion of awareness programs for safety initiatives, additional educational programs for our members, a national standard based on a consensus of our members, supporters and contributors to our industry, and answering our member's questions, needs and concerns.

I am seeking election for my sixth term and I want to be forthcoming about recent events. Yes, I am the co-owner of a tower erection and maintenance company again.

These past few months have been an exciting time for Pat Moore, our fellow employees and me. In early 2004, Pat and I were able to repurchase our old companies, one of which was Doty Moore Tower Services. Many of you may remember Doty Moore as the tower services company we had founded many years ago.

Pat and I have always sought out opportunities and when the opportunity presented itself to acquire Stainless, Inc., the premier tower manufacturing company, along with our old companies, we enthusiastically embraced the idea. Pat and I had worked with Stainless over the course of our 30 years in the tower business. During our employment with SpectraSite, we became increasingly engaged in all aspects of the daily operation of Stainless. I worked closely with the senior management at Stainless and they are an exceptional group of people. I am Vice President of Doty Moore Tower Services as well as President of Stainless.

I ask for another opportunity to serve you, the voting members of NATE.

Thank you.

Don Doty

CALL for CANDIDATES

Are you interested in running for the NATE Board of Directors?

SEE PAGES 9 & 10 FOR DETAILS ON THE **NEW**NATE BOARD OF DIRECTORS ELECTION PROCEDURES/APPLICATION

NATE Board of Directors Candidates



John S. Hanna, Jr.

Tower and Communication Services, Inc. Florence, South Carolina

Tel: 843-662-9936 Email: JCBHA@aol.com Once again election time is here. I am writing this to humbly ask for your vote. After being on the NATE Board of Directors for 3 years, I have not only learned a great deal, but have also made many friends and shared a lot of different views.

The tower industry is in my blood and I can't imagine NOT being in this business. I have spent my life in the tower industry, in the business my father started over 34 years ago. Tower & Communication Services, Inc. is still a small, family owned, full service tower company. I started as a tower hand and although I am now president of the company, I still go out into the field and work alongside my crews. I feel I have shown my dedication and commitment by not only being a NATE Founding Member, but also by serving on both the Safety & Education Committee and the Tower Rigging and Construction Stresses Task Force since its commencement. I assisted in the development of the Hoist Standard as well as the Qualified Climber Standard. I am OSHA 500 qualified and voluntarily serve as an advisor to North Carolina OSHA, helping them develop their own standards for the industry. My company is proud to participate in the Region V NATE/ OSHA Partnership.

If you will once again entrust me with your vote and allow me the honor of serving on the Board and working with the other members, I vow to continue to give you a voice that will be heard as we all work together to ensure a safer, more uniformly regulated tower industry for future generations of our tower "family."

In Sincere Appreciation,

John S. Hanna, Jr.

Tailgate Safety Meeting Topics

The following is a list of tailgate safety meeting topics which have been featured in past Tower Times issues. This list is for your reference. The topics listed should be used as guides when developing your own tailgate safety meetings as part of your company's safety and health program.

Topic	Issue
Understanding Safety Signs	August 2002
Lockout/Tagout	September 2002
Your Hearing: Keep It For a Lifetime	October 2002
Excavations are Serious Business	November 2002
Holiday Fun, Holiday Stress, Holiday Accidents	December 2002
New Year's Resloutions: Safety and Health Attitudes and Actions	January 2003
Material Safety Data Sheets	February 2003
Avoiding Electrical Shocks	March 2003
Forklift Safety - Proper Load Handlin	gApril 2003
Chocking and Blocking	May 2003
Heat Stress - A Summertime Hazard	June 2003
Eight Crane Danger Signs to Watch	ForJuly 2003
Who Do You Blame When You Have An Accident	August 2003
Carelessness	September 2003
Hazard Awareness	October 2003
Make the Best Use of Your First-Aid Kit	November 2003
Cold Medication & Drowsiness	December 2003
The Silent Sickness - CO Poisoning	January 2004
Repeaters	February 2004
Beware of the Tiger	March 2004
Hazardous Atmospheres in Confined Space	April 2004
Don't Ignore Cuts and Scrapes	May 2004
Sun Safety	June 2004
Excavation/Trenching Safety	July 2004
Drunk Driving is a Dead End	August 2004

Board of Directors Election Procedures

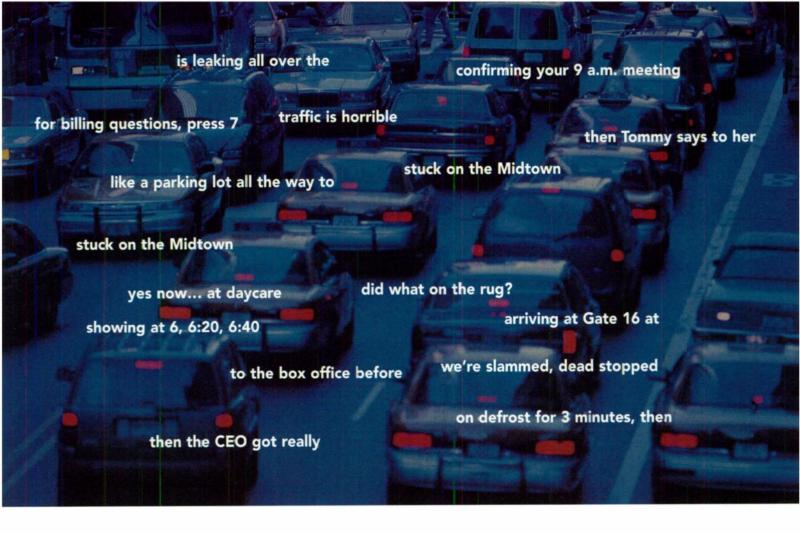
- 1. To qualify as a candidate for the NATE Board of Directors, an individual must be an active member in the Association and must be a managing owner of a voting member company or firm, defined as a person who can legally encumber that company or firm.
- 2. Individuals apply for candidacy by submitting the application form on page 10, a brief position/background statement (maximum of one page in length) and a color photograph to the NATE office. Applications are currently being accepted. The deadline for announcing candidacy is September 1, 2004.
- 3. NATE will publish all candidate information in the July 2004 through November 2004 issues of Tower Times.
- 4. By the end of October, each NATE Voting Member company will be sent voting materials consisting of a ballot, candidate profiles, candidate photographs and rules for casting their vote.
- 5. Each ballot will be sent via secured mail to ensure delivery.
- 6. Ballots from voting members must be received in the NATE office by November 30, 2004.
- 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 in the February 2005 issue of Tower Times.
- 11. Those elected to the Board of Directors will begin serving their two-year term at the annual meeting in February 2005.
- 12. The newly elected Board will choose its executive officers at the annual meeting.

Board of Directors Candidate Application

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.

	eclare your interest in running for the Board e	, p. c.		8 damenon	
	ididate's Name				
Con	npany				
				Yes	No
1.	Is your company or firm a voting me	ember of NATE?	,		
2.	Are you an active NATE member?				
3.	Are you a managing owner of your c	ompany or firm	?		
4.	Are you active in the current operation	ons of your com	npany?		
 6. 	Do you have the authority to encuml in legal transactions, including significant authority on banking accounts, and the your position with your position.	ng bank notes, s the authority to	ignature sign tax returns?		
0.	In your position with your company agency authority to represent the con and external business transactions?				
Dec	claration of Chief Executive (Officer or C	hief Operating) Office	e <i>r</i>
I.	······, ····		of		
-,	(name)	(title)	of(compa	any or firm)	
here	by confirm that	does hol	d the position and	possess t	he
auth	ority as described above.				
		_			
	(Signature of Chief Officer of company or firm)				



INTRODUCING LYNX.GX

BRING ON RUSH HOUR.

The way call volume is growing, you need to add backhaul capacity. And fast.

Build too little and the subscribers hate you. Build too much and the shareholders hate you. Proxim to the rescue. Introducing the Lynx.GX family of point-to-point microwave radios that lets you add 4xT1 - 16xT1 of carrier-class voice and data capacity virtually overnight. Due to its outstanding RF performance, Lynx.GX delivers links exceeding 27 miles with 99.999% reliability. And because it uses the unlicensed 5.8 GHz ISM band, you simply bypass the delays and costs of licensing, leased lines or laying fiber. The flexible split-system design saves even more time and money on deployment and maintenance. Mount the RF Unit indoors to avoid rooftop service. Or mount the RF Unit outdoors, either to maximize distance or to reduce antenna size and recurring tower fees. Lynx.GX gives you all the options – and all the capacity, signal quality, reliability and manageability you need to handle your next Rush Hour.

To learn more, call your Hutton sales representative





Hutton Sales: U.S.: 877-648-8866 Canada: 800-265-8685 www.huttononline.com



Checklist for Evaluating Qualified Contractors

he NATE Board of Directors has approved the Qualified Contractors Evaluation Checklist.
Our thanks to the NATE Safety & Education Committee for their diligent efforts on this project.

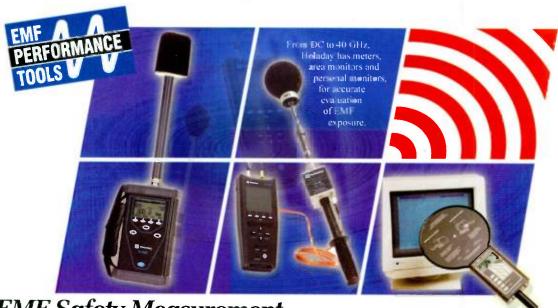
The idea for the checklist grew out of a meeting with the National Telecommunications Safety Panel in which NATE representatives underscored what continues to be the largest safety issue facing the industry – the use of unqualified contractors. Carriers represented at that meeting were informed of how this issue has plagued the industry, and the need for active steps to be taken to address it.

Unqualified contractors have an obvious advantage in gaining work in the industry. They are able to underbid their safety conscious competitors who have invested in training, practices, procedures and proper equipment for their employees. Furthermore, situations featuring multiple layers of contractors can create the impression that

safety is a priority, but beneath the surface, as work is subcontracted out, the company who can do the job cheaply can still underbid the company who will do the job right.

The NATE Qualified Contractors Evaluation Checklist was primarily designed to serve as a tool to help carriers evaluate a contractor's dedication to safety. There have been suggestions that NATE members may also want to submit these forms with their bids to demonstrate that they are meeting practices recommended by their association.

As with the previously released Tower Owner Safety Checklist, the Qualified Contractor Evaluation Checklist is not a legally binding document, but rather one additional method of helping improve safety on the job site by demonstrating qualities to which reputable contractors will adhere. We hope our members will share this list with their clients, and encourage them to hire only those companies who are prepared to work safely.



EMF Safety Measurement Holaday Has Solutions

Meters for the non-ionizing electromagnetic spectrum ELF, VLF, RF Microwave • Personal Protective Equipment Microwave Oven Leakage Testing

Enabling Your Success



www.ets-lindgren.com

Corporate offices: USA +1.512.531.6400 and Finland +358.2.8383300. Company locations in the US, UK, Finland, France, Singapore, Japan and China. Representatives and Distributors worldwide.

An ESCC Technologies Company

National Association of Tower Erectors



Checklist for Evaluating Qualified Contractors

Name	of Contractor:	
Contac	et Person for Contractor:	
Title:		
Addre	ss:	
Teleph	one:	
	The contractor has obtained insurance coverage appropriate for the scope of work, prior to commencing the work (e.g. worker's compensation; general liability; etc.). (Attach Certificates of Insurance.)	
	The contractor has the necessary experience, references and capability to properly perform the specific job at hand.	
	The contractor has a written safety program and agrees to conduct regular safety audits of its job sites by a competent person.	
	The contractor agrees to provide a site-specific safety plan including rigging, structural and RF safety procedures, and fall protection requirements for this specific job.	
	The contractor agrees there will be a competent and qualified person at the project site who will conduct daily safety audits.	
	The contractor agrees to maintain written records of the safety audits for a period of at least one year.	
	The contractor requires pre-employment physical agility or physical fitness tests to determine ability to perform job tasks.	
	CONTINUED ON NEXT PAGE	

	The contractor conducts drug screening of employees for unlawful use of controlled substances.
	The contractor provides an orientation and awareness program for new hires prior to performance of any work.
	The contractor ensures that their tower climbers have been properly trained and understand OSHA regulations in the areas of fall protection and rescue.
	The contractor agrees to conduct a hazard assessment to determine the requirements for personal protective equipment, including fall protection.
	The contractor maintains written documentation of all training as required.
	If the contractor is required to maintain OSHA 200/300 logs, they have submitted those documents for the past two years. For those companies not required to keep OSHA 200/300 logs, they have provided the number of employees they have and a report on accidents they have sustained, including the nature, type and number of accidents for the past two years.
	The contractor agrees to notify the Company in writing if subcontractors are to be used prior to the use of such subcontractors.
	The contractor agrees that any subcontractors hired will be required to meet the same contractor requirements outlined in this document.
	The contractor agrees to adhere to the provisions of OSHA Directive CPL 2-1.36 if any personnel hoisting is to be conducted.
	The contractor agrees to maintain good housekeeping on the job site.
Individ Title:	ual Completing Questionnaire:(Print Name)
Date:	
This do	ocument will be kept on file in the Safety Manager's office.

In Challenging Times, Service Matters Most



More than a million people have been motivated by Ron Kaufman's high-energy speeches and interactive workshops. His repeat clients include government organizations, industry associations and numerous companies in the discerning Fortune 500.

A graduate of Brown
University,
USA, Ron is certified in
Applied Neurolinguistics and is a professional member of the National
Speakers
Association.

Copyright, Ron Kaufman. Visit: www. RonKaufman. com. n difficult economic times, some businesses cut costs by cutting corners on customer service. This is exactly the wrong thing to do. Right now, service matters more than ever. Here's why:

- When people buy during an economic downturn they are extremely conscious of the "hard earned" money that they spend. Customers want more attention, appreciation and recognition for their purchases, not less.
- 2. Customers want to be sure they get maximum value for the money they choose to spend. They want assistance, education, training, installation, modifications and support. The basic product may remain the same, but they want more service.
- customers want stronger guarantees that their purchase was "the right thing to do". In good times, a single bad purchase may be quickly overlooked or forgotten, but in tough times, every expenditure is scrutinized. Provide the assurance your customers seek with generous service guarantees, regular follow-up and speedy follow-through on any queries or complaints.
- 4. In tough times, people spend less time traveling, wining and dining, and more time carefully shopping for each and every purchase. Giving good service enhances the customer's shopping experience, and boosts your own company image.

When times are good, people move fast and sometimes don't notice your efforts. In tighter times, people move more cautiously, and notice every extra effort that you make.

5. When money is tight, many people experience a sense of lower self-esteem. When they get good service from your business it boosts their self-image. And when they feel good about themselves, they feel good

- about you. And when they feel good about you, they buy.
- 6. In tough times, people talk more with each other about saving money and getting good value. "Positive word of mouth" is a powerful force at any time. In difficult times, even more ears will be listening. Be sure the words spoken about your business are good ones.

So giving good service in tough times makes good business sense. But how do you actually achieve it? Here are eight proven principles you can use. I call them "The Secrets of Superior Service":

1. Understand how your customers' expectations are rising and changing over time. What was good enough last year may not be good enough now. Use customer surveys, interviews and focus groups to really understand what your customers want, what they value, and think about what they are getting,



In Challenging Times, Service Matters Most

(or not getting) from your business.

2. Use quality service to differentiate your business from your competition. Your products must be reliable and up to date... but your competitors' are, too. Your delivery systems must be fast and user-friendly, but so are your competitors'!

Make a real difference by providing personalized, responsive and "extra-mile service" that stands out in a unique way that customers will appreciate, and remember.

3. **Set and achieve high service standards.** Go beyond basic and expected levels of service to provide your customers with desired and even surprising interactions. Determine the "norm" for service in your industry, and then find a way to go beyond it. Give more choice than "usual", be more flexible than "normal", be "faster" than the average and extend a "better" warranty than all the others.

Your customers will notice your higher standards.

Cuality Lifting & Safety Products You Can Depend On!

the Grosby Frank.

Elk River

MILLER

Euckingham

704 East Benson Road • Sioux Falls, SD 57104

1-800-888-1612
605-335-0041 • FAX: 605-335-8033

But eventually they'll be copied by your competitors, too. So don't slow down. Keep on improving!

Learn to manage your customer's expectations.
 You can't always give customers everything their hearts desire. Sometimes you need to bring their expectations into line with what you know you can deliver.

The best way to do this is by first building a reputation for making and keeping clear promises. Once you have established a base of trust and good reputation, you only need to ask your customers for their patience in the rare circumstances when you cannot meet their first requests. Nine times out of ten they will extend the understanding and the leeway that you need.

The second way to manage customer's expectations is with the tactic called "Under Promise, then Over Deliver". It works like this: your customer wants something done FAST. You know it will take one hour to complete. Don't tell your customer! Let them know you will rush the project...but then promise 90 minutes. Then, when you are done in just an hour (as you knew you would be all along), your customer will be delighted that you actually finished the job "so quickly".

5. Bounce back with effective service recovery.

Sometimes things do go wrong. When it happens to your customers, do everything you can to set things right again. Fix the problem. Show sincere concern for any discomfort, frustration or inconvenience. Then "do a little bit more" by giving your customers something positive to remember - a token of goodwill, a small gift of appreciation, a discount on future orders, or an upgrade to a higher class of product.

This is not the time to lay blame for what went wrong, or to calculate the costs of repair. Restoring customer goodwill is worth the price in future orders and new business.

6. Appreciate your complaining customers.

Customers with complaints can be your best allies in building and improving your business. They point out where your system is faulty, procedures are weak or problematic. They show you where your products are below expectations or your service doesn't measure up. They point out areas where your competitors are getting ahead, or where your staff is falling behind. These are the same insights and conclusions that people pay consultants to provide. But a "complainer" gives them to you free!

And remember, for every one person who complains, there are many more who won't even bother to tell you. The others just take their business elsewhere. At least the complainer gives you a chance to reply and set things right.

7. Take personal responsibility. In many organizations, people are quick to blame others for problems or difficulties at work: managers blame staff, staff blame managers, engineering blames sales, sales blames marketing and everyone blames finance. This doesn't help. In fact, with all the finger pointing going on, it tends to make things worse. Blaming yourself doesn't work either. No matter how many mistakes you may have made, tomorrow is another chance to do better. You need high self-esteem to give good service. Feeling "ashamed" doesn't help.

It doesn't make sense to blame the computers, the system or the budget, either. This kind of justification only prolongs the pain before the necessary

changes take place.

The most reliable way to bring about constructive change in your organization is to **Take Personal Responsibility** and help make good things happen. Make recommendations, propose new ideas, give your suggestions, volunteer to help out with problem-solving teams and projects.

8. **See the world from your customers' point of view.** We often get so caught up in our own world that we lose sight of what our customers actually experience.

Make time to stand on the other side of the counter, or listen on the other end of the phone. Be a "mystery shopper" at your own place of business. Or be a customer for your competition. What you notice is what your customers experience every day!

Finally, remember that service is the currency that keeps our economy moving. I serve you in one business, you serve me in another. When either of us improves, the economy gets a little better. When both of us improve, people are sure to take notice. When everyone improves, the whole world grows stronger and closer together. T

TWR Lighting, Inc. LEaDing the Way with New Technology



- * Industry's First Medium Intensity Dual
 System Utilizing LED Technology
- * First complete product line utilizing LED Technology
- * 5 -Year Warranty on all LED products

4300 Windfern Rd. Suite 100 Houston, Tx. 77041-8943 Ph: 713-973-6905 Fax: 713-973-9352 www.twrlighting.com ©2003 TWR Lighting, Inc. Visit our web site! www.twrlighting.com Call For Product Catalogs!

SAFETY & EDUCATION COMMINITIES EDUCATION

Crane Safety for All



Tom Bunk is a member of the NATE Safety & Education Committee and is the Director of Operations for United States Tower Services, LTD of Frederick. Maryland. He can be reached at 301-874-5885 or tombunk@ ustowerservices. com

Il personnel involved with the setting up and operations of cranes are responsible for the staging and the rigging requirements. As with all rigging operations a tailgate meeting is required so that the whole team can review procedures and each person will know their responsibilities. The crew should follow these minimal requirements:

- Comply with the manufacturer's specifications and requirements of the operation of the crane, derrick and all rigging equipment;
- 2) Hand signals should follow the ANSI standard and be understood by all;
- A competent person shall inspect all machinery and equipment prior to each use;
- 4) Know the weight and the balance point of the load. If the pick will be over 75% of the rated capacity, the weight must be known exactly and all of the rigging must be included in the final pick weight;
- 5) Assure that the boom is positioned over the load to prevent "swinging". Sometimes you may have to set up short on the load to compensate for flex in the boom;
- 6) Meet power line minimal clearances;
- 7) Verify the maximum pick radius;
- 8) Verify the maximum pick height;
- 9) Level the crane to within one degree. A short boom crane can lose 30% of its capacity when it is three degrees out of level and a long boom can lose 50% of its capacity when it is three degrees out of level; and
- 10) Know that one of the critical points of setting up the crane is the ground stability.

Ground surface and conditions are very critical for the operations of a crane. The following points should be considered: total imposed load; supporting surface area; pounds per square foot; and soil stability.

Total Imposed Load

The entire load on the outriggers from the sum of all of the weights plus the dynamics of the load reactions is the total imposed load.

Supporting Surface Area

The amount of area in contact with the ground will determine the bearing pressure the crane and load will exert on the soil. When the bearing pressure exceeds the soil stability, cribbing must be used to increase the bearing area.

Cribbing requirements:

- Must be strong enough to withstand the weight and dynamics of the crane without major deflection;
- 2) Must be secured together to prevent slippage or collapsing; and
- 3) Should be in complete contact with the soil with no voids or unsupported areas.

Pounds Per Square Foot

A good rule of thumb is to assume each out rigger could be carrying up to 85% of the load.

One 3' \times 3' float = 9 sq. ft.

100 tons divided by 9 sq. ft. = 11.11 tons x .85 = 9.5 tons per square foot.

Soil Stability

Different type soils and soil conditions will give you different load bearing pressure. There are three broad groups of soils:

1) Granular soils, including sand and gravel;

- 2) Fine grained soils, including silts and clays; and
- 3) Organic soils, including peat.

Factors such as water tables, distance from excavations, working over disturbed soil, man holes or culverts must be considered.

All of the above factors are very important; but, remember the crane is only as stable as the supporting surface it is set up on. Sometimes you may just have to regroup and say no to a pick; sometimes you may have to bring in an engineer to analyze the conditions and support

the operations with recommended procedures. Take your time and do it right. The time you spend on the set up will pay for itself. When you are at maximum capacity and maximum pick height, it is no time to start second guessing the crane setup. Be safe. T



If you have not already done so, please pay your membership dues. They were due on July 1, 2004.

AUGUST 1, 2004

NATE 2005 Sponsorship Form Due (See pages 25-31)

SEPTEMBER 1, 2004

NATE Board of Directors Candidacy Deadline (See pages 9-10)

SEPTEMBER 14-15, 2004

Tower Summit & Trade Show

Las Vegas, Nevada

www.towersummit.com

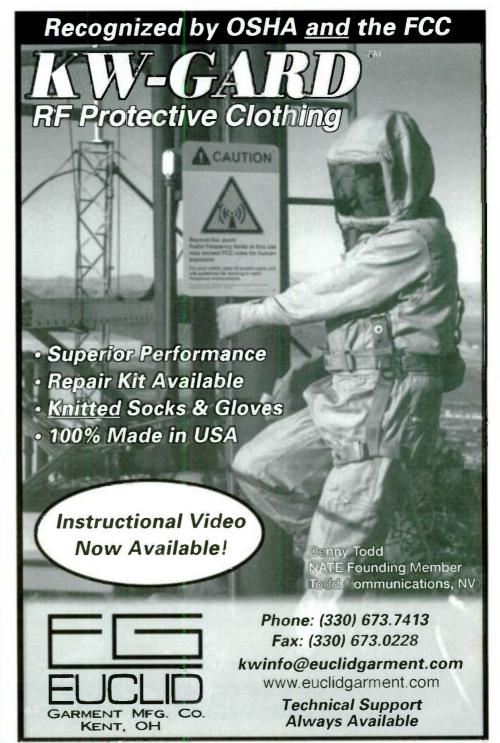
OCTOBER 5-7, 2004

PCIA Wireless Infrastructure Conference & Expo Dallas, Texas www.pcia.com

FEBRUARY 14-17, 2005

NATE 2005 Dallas, Texas (See pages 25-31)





PHATE TO CONTEST



Submit your dynamic photos to the NATE office by the **September 15, 2004** deadline for your chance to win your choice of:

2 FREE Full Conference Badges to NATE 2005

in Dallas, Texas, February 14-17, 2005

\$100 NATE Corporate Collection Gift Certificate

The winning photo will also be featured on the January, 2005 *Tower Times* cover.

Qualifying photos chosen for **Honorable Mentions** will also be featured on future Tower Times covers and other NATE printed materials.

- · Photos may be submitted in 2 different formats:
 - as 4" x 6" or larger prints; or
 - as a TIFF or JPEG high resolution (at least 300 dpi) digital file saved to a CD accompanied by a color printout.
- · All photos must be relevant to the tower industry.
- Any photo portraying improper safety will not be considered.
- All photos must have the entry form below attached.
- There is no limit to the number of photos submitted as long as each photo has the entry form attached.
- · Photos and CD's will not be returned.
- NATE reserves the right to use any photo submitted in print, video, or on the NATE website, as long as proper credit is given. NATE will not distribute photos to other parties.

Contact Deb at 605-886-5450 or deb@natehome.com with further questions.

Contact	Photographer
City/State/Zip	
Phone #	Email Address

Submit Photos to: NATE Photo Contest • 8 Second Street SE • Watertown, SD 57201-3624

SEPTEMBER 15, 2004 DEADLINE

NATE INSURANCE PROGRAM





Patrick Shea
is an Account Executive for
Arthur J. Gallagher & Co.
He can be reached at Arthur J.
Gallagher's office at +201
Bee Caves Road, Ste. A-101,
Austin, Texas 78746.
Tel: 800-637-1016;
Fax: 512-306-8808;

E-mail: patrick_shea

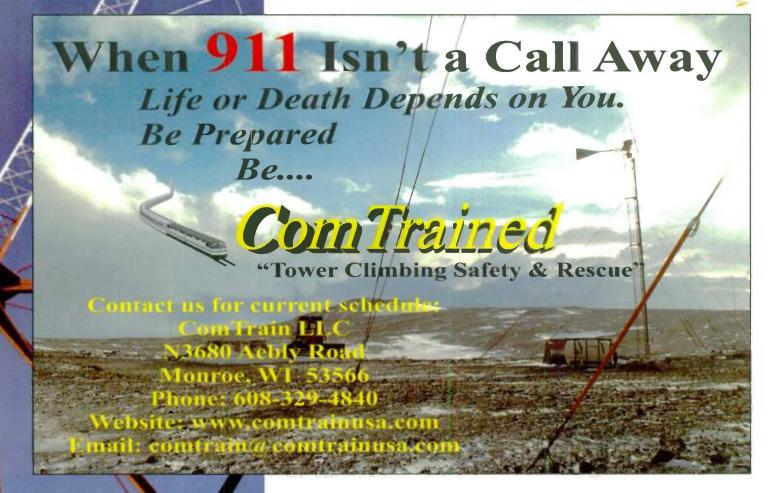
@aig.com

n various industry reports and in discussions with our current NATE member clients, it appears that the tower industry is in a period of stabilized growth. Recent stock analyst reports reflect a growing interest in the public tower companies as a possible equity investment. A look at some previous analyst reports in the last two years painted a far more pessimistic view of the tower industry. The surviving public tower companies and the large private companies have managed to stay in business so far and are now clawing their way to some marginal profitability. Many, however, are managing huge long-term debt and must continue this upward growth for survival.

What this means for NATE mem-

bers is that there is more construction and maintenance work available to bid, and this means more employees and hopefully proportional revenue growth. I know that you laugh about the revenue growth that may not follow due to the cost that many jobs are bid at. This trend continues and we know the frustration that it causes NATE members.

We at the NATE Insurance Program continue to see contracts that require large responsibilities for subcontractors from insurance to "hold harmless" language. We do not feel that owners and general contractors do enough to qualify sub-contractors and review the capabilities. On the surface, a low bid contract with all the signatures and the proper insurance certificate



NATE Insurance Program

attached may seem adequate. If a careful review is done, the insurance language agreed to in the contract may not match the certificate. Many conditions agreed to in the contract would not have the insurance to support it.

Subcontractors that are operating without the proper safety and insurance coverage have nothing to lose in signing a contract that has large subcontractor responsibilities. If a loss occurs, and the subcontractor is found to have inadequate insurance to pay for the loss, the owner then must step in and pay the loss. After the loss is paid, the owner must go after the subcontractor for restitution. If the subcontractor has not already gone out of business, the owner must file a lawsuit against him for damages. If there is inadequate insurance, the loss must be paid by the subcontractor who certainly will have limited assets.

It is important for all NATE members to read and understand what the contract is requiring you to provide in terms of responsibility when a loss occurs. It is also important to know what your insurance provides you and what it does not provide vou so you can negotiate the contract accordingly.

If you know of situations where contracts are being bid to unqualified subcontractors you must contact owners and let them know this is occurring. If communicated properly and without sour grapes, companies will take action in assuring that proper review is done on subcontractor qualifications. Tr

Creating an avenue for NATE members to obtain competitive insurance coverage is an important concern for the Association. NATE has formed an alliance with Arthur J. Gallagher & Co., in conjunction with AIG, to serve as the brokerage firm for the NATE Insurance Program. The insurance program is tailored to meet the unique needs of individual NATE member companies. Members have the option of using their current insurance agent or purchasing their insurance directly from Arthur J. Gallagher & Co.



FCC Adjusts Maximum Forfeiture Penalties to Reflect Inflation

The FCC has amended its rules to increase the maximum monetary forfeiture penalties available to it, to account for inflation since the last adjustment. The new maximum amounts will be as follows:

- (1) for broadcasters and cable operators -- \$32,500 per violation or per day of a continuing violation with the amount for a continuing violation not to exceed \$325,000;
- (2) for common carriers -- \$130,000 per violation or per day of a continuing violation with the amount for a continuing violation not to exceed \$1.325 million: and
- (3) for others -- \$11,000 per violation or per day of a continuing violation with the amount for a continuing violation not to exceed \$97,500.

http://hraunfoss.fcc.gov/edocs_ public/attachmatch/ DOC-248483A1.doc

http://hraunfoss.fcc.gov/edocs_ public/attachmatch/ FCC-04-139A1.doc TT

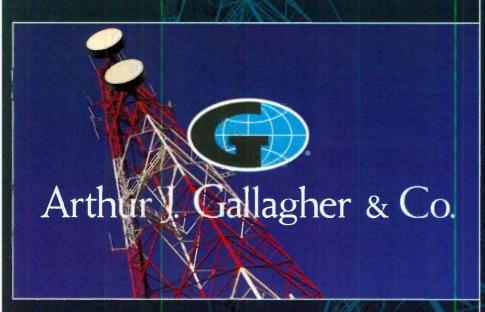
Source: The CGC Communicator #637

If you have a news item of interest to Tower Times readers, please Email: deb@natehome.com

NATE INSURANCE PROGRAM

90% OF BEING SMART IS KNOWING WHAT YOU'RE DUMB AT!

GALLAGHER AND AIG ARE THE MOST KNOWLEDGEABLE, MOST EXPERIENCED AND BEST PERFORMING INSURANCE PROFESSIONALS IN THE TELECOMMUNICATIONS INDUSTRY.



CONSIDER THIS

- Gallagher is the fourth largest insurance broker in the United States
- We have the only viable, financially sound program for NATE members in the country

THE PROGRAM IS UNDERWRITTEN BY AIG, THE MOST FINANCIALLY SOUND INSURER ON THE PLANET.

HOWEVER, IT DOES NOT STOP WITH SIZE AND STABILITY!

- Eight years of experience managing the NATE program and the many insurance issues that directly affect your industry.
- The most respected names in your industry are NATE Insurance Program members.
- We understand owner contracts
- Foremost expert in Certified Contractors Programs
- Contributing member of the OSHA Tower Work Group
- Free analysis and quote

BEST OF ALL

Value. We realize that many of you are self-made businesses trying to survive strong competition in a difficult economic environment. Our commitment to NATE membership and the tower erector industry is long term. We will continue to offer the best-valued program in the industry!

CAN YOUR INSURANCE CARRIER SAY THE SAME?

Contact Arthur J Gallagher. The SMART choice for NATE members!
World Radio History

WHAT DO ARTHUR J. GALLAGHER AND AIG OFFER NATE MEMBERS?

1. WORKERS COMPENSATION COVERAGE

- All states (except monopolistic)
- Consolidated Program eliminating need for multiple policies
- NATE audit procedures allowing break out of payroll into proper class codes
- · Blanket waiver of Subrogation

2. GENERAL LIABILITY COVERAGE

- Limited Contractors Professional
- Blanket waiver of Subrogation
- · Blanket Additional Insured
- Aggregate Limits per Project
- Employee Benefits Liability

3. UMBRELLA LIABILITY

 Following form over Contractor's Professional Liability

4. PROPERTY/TRANSIT

 Coverage available for Installation Floaters, Contractor's Equipment, Property on a single policy

5. SAFETY AND CLAIMS SERVICE

- Customized NATE safety consulting
- Specialized Claims Service 24 hours

6. GALLAGHER SERVICES

- Full Service and Analysis at no cost to NATE members
- Certificates of Insurance processed immediately

NATE MEMBERS:

Call Patrick, Scott, Delia or Eric at Arthur J. Gallagher & Co. today for your free analysis and quote or e-mail scott_hermesmeyer@ajg.com



1-800-687-1016



Kevin Reski is a member of the NATE Membership Committee and is President of Great Plains Towers, Inc. of West Fargo, North Dakota. He can be reached at 800-853-2236 or kreski@great plainstowers.com

irst of all I would like to add my personal welcome to the new members of the family of NATE.

> A.R. Wireless, Inc. Johnstown, Ohio

CAL Telecom Services, LLC Mobile, Alabama

> Portapage Millwood, West Virginia

Radio Tower Company Portland, Oregon

Congratulations to those of you who are able to read this month's Tower Times issue! It tells me that you are already part of a company that cares enough to improve your life and the management's concerns about company-wide safety. Of course NATE is only the stepping stones to get you to compliance and safety. There is no sugar coating it; it takes daily perseverance to practice what is required to have compliant employees.

Our shop could have "never" gotten to the level of safety, training and compliancy today without the hard work of the crew in our past and present NATE Board of Directors and NATE Administrative Staff. Thanks again.

We cannot stress enough the value which NATE has provided for us in our shop. It now shows in every procedure we use, in every engineered hoist we use, in every engineered gin pole we fly (old and new), in every crane and lift operation, in every safety climb cable we attach ourselves to, in every steel or nylon choker we rig with, in every block and shackle we use, etc. NATE's impact is profound, and we are very proud of it.

Like I've said in the past, I can only hope that our employees never have to live through the terror of so many of my pre-NATE nightmare tower experiences such as something didn't work out in the lift, the runaway hoist, the runaway winch spool, the slowly folding gin pole, the sheave pin falling out of the rooster head, the snapping sound of an overloaded cable, a corroded anchor shaft sliding out of the ground to be stopped by the ground wire, or a homemade rope lanyard giving way.

In the past, some things we learned on our own and some things we learned by working with others. By joining NATE you can also learn all of the correct habits and learn what not to do by others' mistakes.

We now have 545 active NATE members and by the time you read this, most of you will have had received your NATE membership renewal forms and invoice. So before you close this Tower Times, process that invoice and get it in the mail to the NATE office to help them keep your association rolling.

Money certainly has been acting weird and late for the last year, but don't let it affect your dedication to NATE. Together we stand and stay proud. Tr

- · Access to key players in the tower industry
- NATE Safety Program, a guide for member companies to use when developing their own safety programs
- NATE/OSHA Partnership
- · Complimentary subscription to Tower Times magazine
- · NATE Insurance Program with Arthur J. Gallagher & Co. tailored to meet the unique needs of individual companies
- · A strong voice in Washington through NATE's marketing representative, Bob Lawrence & Associates
- · Continuing safety and education through videotapes, educational sessions and safety resources
- · Strong unified voice to work with OSHA on new and improved tower safety regulations
- · Legal counsel available to members through Seyfarth Shaw
- · NATE Annual Conference & Exposition
- · Use of NATE's registered logo
- · Membership plaque and certificate which are updated annually
- · Access to NATE's membership list
- · Complimentary website link
- · Opportunity to serve on committees and subcommittees
- NATE's Corporate Collection Sportswear



Order Form

TOTAL AMOUNT DUE

Tower Times Subscriptions: If you would like to become a subscriber to *Tower Times* or if you have enjoyed reading *Tower Times* and would like to continue receiving this monthly publication, please complete the form below and return with payment to the NATE office. NATE Members will continue to receive *Tower Times* as a membership benefit.

Tower Times Back Issues: Many readers tell us they continually refer to past *Tower Times* for technical data and safety information. *Tower Times* has been published since April 1995 on a monthly basis with the exception of 3 issues. May and June 1995 were combined, as were June and July 1995 and July and August 1995. To order copies of any or all of these past issues, complete the form below and return to NATE with payment (\$4.95 per back issue).

return to NATE with payr	nent (\$4.95 per back issue).		
Please <u>renew</u> r current subscrip for one year.		sub- se sign ☐ Plea bac	ase send me the ck issues listed
Month If you wish to order all of	Year The back issues of Tower Times, plea	Month Size contact the NATE off	ice for Total Amount Due.
Credit Card # Signature Print Name Company	Check enclosed	p. Date	 United States \$50.00 One Year (12 issues) Canada & Mexico \$75.00 One Year (12 issues)
City	State Fax	Zip	1
NATIONAL AS 8 Second	Mail or Fax with payment to: SOCIATION OF TOWE Street SE • Watertown, SD 5720 5865 or 888-882-5865 • Fax: 60	01-3624	X \$4.95 EACH

Please allow 5 days for your order to be processed.

Advertise in Tower Times

Do you want to reach the key players in the tower industry?

Are you tired of spending a fortune each month on your advertising budget?

If so, advertising in *Tower Times* is the right choice.

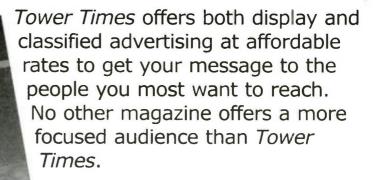
2004 Media Planner

Mechanical

Classified

Online

Requirements
Insertion Order



From a full-page, full-color ad to a black and white classified ad, your message will get across without breaking the bank.

For more information and to request the 2004 *Tower Times*Media Planner, please contact
Deb Moldenhauer at:

605-886-5450

or deb@natehome.com

You may also wish to visit the NATE website for a printable version of the 2004 *Tower Times* Media Planner. The advertising information is located at the following address:

www.natehome.com/TowerTimes/AdvertisingInformation/Index.cfm

The deadline for the October issue is September 1, 2004.

Make Your Plans Today!





February 14 - 17

ake a BIG impact!

Meetings

Exhibits

Educational Sessions

Luncheons

Receptions

Networking

All this and more!

Wyndham AnatoleSM

Dallas, Texas

World Radio History

Sponsorship Packages

DIAMOND 1 Exclusive

- 20' x 30' (600 square feet) exhibit space with prominent location
- Distribution of personalized tote bags (produced by sponsor and distributed on site by show management)
- Superior placement of company name/logo on direct mail conference materials
- Company name/logo placement on wrap-around show guide bands (exact size to be determined)
- Superior placement of company name/logo on signage and banners posted throughout the annual event
- Diamond sponsor recognition with 70-word company profile/ description in show guide
- Superior placement of company name/logo to appear on show shirts and totes
- Superior placement of company name/logo to appear in Tower Times leading up to and following event

- Acknowledged at the Keynote/General Session and presented with an award
- Twenty full conference & exposition passes
- Center spread, four-color ad in show guide (exact size to be determined)
- Five full page, four-color ads to appear in Tower Times in 2005
- One center spread, four-color ad to be used in the February, 2005 **Tower Times**
- First right of refusal for NATE 2006 Diamond Sponsorship
- One educational session speaking opportunity (with sponsorship secured prior to August 1, 2004)
- Company name and logo link placed on NATE 2005 event
- Two single pieces of literature distributed with registration materials

PLATINUM 1 Exclusive

- 20' x 20' (400 square feet) exhibit space with prominent location
- Prominent placement of company name/logo on direct mail conference materials
- Prominent placement of company name/logo on signage and banners posted throughout the annual event
- Platinum sponsor recognition with 55-word company profile description in show guide
- Prominent placement of company name/logo to appear on show shirts and totes
- Prominent placement of company name/logo to appear in Tower Times leading up to and following event

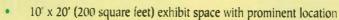
- Acknowledged at the Keynote/General Session and presented with an award
- Fifteen full conference & exposition passes
- One full page, four-color ad in show guide (exact size to be
- Four full page, four-color ads to appear in Tower Times in 2005
- First right of refusal for NATE 2006 Platinum Sponsorship
- One educational session speaking opportunity (with sponsorship secured prior to August 1, 2004)
- Company name and logo link placed on NATE 2005 event website
- One single piece of literature distributed with registration materials

GOLD 4 Total Available





STRUCTURES



Company name/logo to appear on direct mail conference materials

Company name/logo to appear on signage and banners posted throughout the annual event

Gold sponsor recognition with 40-word company profile/description in show guide

Company name/logo to appear on show shirts and totes

Company name/logo to appear in Tower Times leading up to and following event

Acknowledged at the Keynote/General Session and presented with an award

Two full page, four-color ads to appear in Tower Times in 2005

Ten full conference & exposition passes

1/2 page, four-color ad in show guide (exact size to be determined)

Company name and logo link placed on NATE 2005 event website





SILVER 4 Total Available







- 10' x 10' (100 square feet) exhibit space with prominent location
- Company name/logo to appear on direct mail conference materials
- Company name/logo to appear on signage and banners posted throughout the annual event
- Silver sponsor recognition with 30-word company profile/ description in show guide
- Company name to appear on show shirts and totes

- Company name/logo to appear in Tower Times leading up to and following event
- Acknowledged at the Keynote/General Session and presented with an award
- One full page, four-color ad to appear in Tower Times in 2005
- Six full conference & exposition passes
- 1/4 page, four-color ad in show guide (exact size to be determined)
- Company name and logo link placed on NATE 2005 event website

BRONZE

- Company name/logo to appear on direct mail conference materials
- Company name/logo to appear on signage and banners posted throughout the annual event
- Bronze sponsor recognition in show guide
- Company name to appear on show shirts and totes

- Company name/logo to appear in Tower Times leading up to and following event
- Acknowledged at the Keynote/General Session and presented with an award
- Three full conference & exposition passes
- Company name and logo link placed on NATE 2005 event website

PATRON















- Company name/logo to appear on direct mail conference materials
- Company name/logo to appear on signage and banners posted throughout the annual event
- Patron sponsor recognition in show guide
- Company name to appear on show shirts and totes

- Company name/logo to appear in Tower Times leading up to and following event
- Acknowledged at the Keynote/General Session presented with an award

Sponsorship Packages (Continued)

FRIENDS of NATE







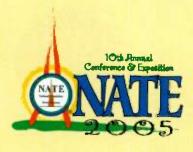






- Company name/logo to appear on signage and banners posted throughout the annual event
- Friends of NATE sponsor recognition in show guide

Acknowledged at the Keynote/General Session and presented with an award



Since the NATE membership consists of CEO's and key decision makers from all facets of the tower industry, your participation will gain your company tremendous exposure.

Help make attendees aware of your commitment to quality and safety by supporting NATE 2005 with your contribution!

Don't Miss Out! If you are interested in sponsoring NATE 2005 please complete the form found on page 30.

All sponsors are encouraged to return the sponsorship form by August 1, 2004 to retain all sponsor benefits.

tor Profile

nchor Testing Equipment Anchoring Systems Antennas, Antenna Mounts and Accessories

Anti Two Block Systems

Automation Beacons

Bolts

Boom Trucks

Cable and Accessories

Capstans

Coaxial

Communications

Communication Shelters

Concrete Forming

Connectors

Consulting Services

Disaster Support Systems EMF Test and Measurement Products Engineering Services

Equipment Shelters

Fall Arrest and Fall Protection

Fasteners

Foundations

Gin Poles

Grounding

Hoists

Identification Tagging Systems

Instrumentation

Insurance

Lighting

Lightning Protection

Measurement Devices

Monopoles

Networks

On-Site Communications

Package/Delivery Services

Payroll Services Radio-Mobile, Cellular, SMR, Paging

Rescue Training

RF Consulting, Garments,

Monitoring Devices

Rigging

Roosterheads

Rope

Safety Equipment

Security

Site Management

Slings

Strobes

Test Equipment

Tools

Tower Accessories

Towers - Guyed and Self-Support

Training - Safety and Rescue

Waveguide Support Products

Winches

Exhibit Hall

AIG/Arthur J. Gallagher & Co	
ALT	209
Altec Industries	221
Aluma-Form	415
AMERISAFE	
Bird Technologies Group	
Buckingham Mfg. Co., Inc	
Cellxion, LLC	
CHANCE	
COMTRAIN LLC.	
DBI/SALA Protecta	
Dielectric	
Dupont Materials & Installation	
Electro Mechanical Industries, Inc.	
Elk River, Inc.	
ERI - Installations.	
ERICO, Inc.	
Euclid Garment Mfg. Co.	
Gravitec Systems, Inc.	
Harger Lightning & Grounding.	
Huber + Suhner	
ITL, LLC	
Kullman Industries, Inc	
Lemco Tool Corporation	
Lights by H & H Industries Inc	
Megger	
Narda Safety Test Solutions	240
NEWMARK International, Inc.	334
Novatec Braids	
PCIA	137
PennSummit Tubular, LLC	
Positron Inc.	235
Preformed Line Products	
Primus Electronics	
Radian Communication Services Corporation	
Radio Frequency Systems	125
Radiofrequency Safety International (RSI)	
Roco	
Sabre Communications Corporation	
SITE PRO 1	
Talley Communications Corp	429
FESSCO Technologies	
Times Microwave Systems	
Tractel N.A	
Franstector / Polyphaser	
Trilogy Communications, Inc.	
Trylon TSF	
TWR Lighting, Inc.	
Unimar, Inc.	
Valmont Structures	
Weisman Consultants Inc	353

Last Revised 7/6/04 - Subject to Change





Exhibit Space & Sponsorship
Application/Contract

February 14-17, 2005

Wyndham AnatoleSM

2201 Stemmons Freeway • Dallas, Texas 75207

PLEASETYPE OR PRINT LEGIBLY

For NATE Use Only
Date Received
Time Received
Amount Received
Points
Booth(s) Assigned

All exhibitors with earned seniority points are encouraged to return space application, contract and full payment before May 3, 2004. After May 3, 2004, remaining space will be available on a first come, first serve basis. All sponsors are encouraged to return sponsorship form by August 1, 2004 to retain all sponsor benefits.

NOTICE: All exhibitors and attendees agree that as of a condition of attending this event they will not engage either directly or Indirectly in the activity of soliciting away any existing employees of any member companies during this function. Anyone engaging in soliciting away existing employees during this event will be immediately removed from the event and not allowed to return. Additional consequences of such activities include prohibition from attending future NATE events and the possible revocation of NATE membership where applicable.

Please reserve exhibit space in NATE 2005 to be held February 16-17, 2005 at the Wyndham AnatoleSM in Dallas, Texas. We request the space(s) listed below. If our space choice has already been allocated, we request NATE to assign what it considers the best space available. We understand this exhibit space application becomes a binding contract when accepted by NATE. We agree to abide by the rules and regulations published on the reverse side.

Exhibitor Packages (US Funds) Exhibit Space Size Members Non-Members 10' x 10'(Includes 6 full conference badges) \$2,500 \$5,500 10' x 20'(Includes 8 full conference badges) \$4,600 \$8,800 20' x 20' Island (Includes 12 full conference badges) \$8,800 \$12,000 Exhibitor/Sponsor Information

Company	listings and on badges EXACTLY as they are listed in the NATE member
Contact	Title
Address	
City	State Zip
Telephone	Fax
E-mail	Website
Confirming Signature	
Title	Date
	Wilson We Desire Death Commission
	•
Key Personne	el (TO BE PUBLISHED IN SHOW GUIDE) Title
Key Personne	el (TO BE PUBLISHED IN SHOW GUIDE)
Key Personne	el (TO BE PUBLISHED IN SHOW GUIDE) Title

Sponsorsin	ът	atra	500
Diamond Sponsor (Includes 20' x 30' Exhibit			\$75,000
Platinum Sponsor ((Includes 20' x 20' Exhibit			\$50,000
Gold Sponsor (4) (Includes 10' x 20' Exhibit	Space)		\$25,000
Silver Sponsor (4) (Includes 10' x 10' Exhibit	Space)		\$12,000
Bronze Sponsor			\$7,500
Patron Sponsor	۵	\$2,501	- \$5,000
Friends of NATE		\$500	- \$2500

Sponsors: Please email your company logo in an EPS or TIFF format to <u>deb@natehome.com</u>. If the company logo is not received by August 1, 2004, the NATE office reserves the right to use the logo on file in the NATE office. Banners provided are designed to acknowledge sponsorship and are not intended to replace any banner designed for sponsor's booth, or to promote specific product or booth location. All literature pieces must be submitted to show management for approval prior to printing and mention participation at the NATE 2005 Conference & Exposition.

Payment Method: ☐ Check Enclosed ☐ VISA ☐ MasterCard ☐ American Express
Credit Card #
Exp. Date
Card Holder's Name
Amount authorized to charge to my credit card \$
Signature
Date

Please Return Exhibit Space & Sponsorship Application/Contract and Full Payment To:

NATE 2005 8 Second Street SE Watertown, SD 57201-3624 Tel: 605-882-5865 or 888-882-5865 Fax: 605-886-5184

See page 31 for Contract, Rules and Regulations

NATE 2005 Contract, Rules and Regulations

This show is sponsored and managed by the National Association of Tower Erectors. The words "Show Management" used herein shall mean the sponsors acting through their officers, the Conference Chairman, or Conference and Exposition Managers. All matters and questions not covered by the following rules and regulations or the Exhibitor Service Manual are subject to the decision of Show Management. The General Information, Rules and Regulations may be amended or supplemented at any time by Show Management, and all such amendments or additions shall, upon reasonable notice, be as equally binding on all parties affected as the original General Information, Rules and Regulations.

Eligibility is generally limited to persons or firms engaged in either 1) furnishing consulting, engineering, design and technical services utilized by the Tower Industries, or 2) the manufacture, sale or service of telecommunications service and support products. Applicants may be required to submit the nature of their business and the scope of items to be exhibited. Show Management reserves the right to reject any appli-

3. Assignment of Space

Exhibitors submitting completed contract and full payment of space cost will be assigned space based on seniority points and size.

4. Use of Space

The space contracted for is to be used solely for the Exhibitor whose name appears on the contract, and it is agreed the Exhibitor will not sublet nor assign any portion of same without the written consent of Show Management. Each Exhibitor must have a minimum of 100 square feet of contracted exhibit space. Exhibitors may combine space provided each exhibitor completes a valid contract and reserves a minimum of 100 square feet (i.e. two exhibitors reserve 200 square feet each and share a 400 square foot island). Program listings will note only contracted exhibitors.

5. Cancellation

A cancellation fee of 50% of the total space cost shall be assessed in the event of contract cancellation 60 days or more prior to first move-in day. No refunds are available for cancellations less than 60 days prior to first move-in day. All cancellation notices must be received in writing. In the event of cancellation, show management reserves the right to reassign cancelled exhibit space and sponsored items. Sponsorship packages are non refundable.

6. Default

Any Exhibitor falling to occupy by 9:00 p.m. on Tuesday, February 15, 2005, any space contracted for but not canceled is obligated for the full cost of the space and is not entitled to any rebate. Show Management shall have the right to use said space to suit its own convenience, including selling the space to another Exhibitor without any rebate or allowance to the defaulting Exhibitor and without incurring any obligation of any kind to said prospective Exhibitor.

7. Hold Harmless and Insurance

Exhibitor assumes the entire responsibility and liability for losses, damages and claims arising out of injury to Exhibitor's employees, agents or guests, or damage to Exhibitor's displays, equipment, and other property brought upon the premises of the exhibit hall. Exhibitors shall indemnify and hold harmless the exhibit hall, Show Management and/or NATE, their agents and employees from losses, damages and claims inside or outside the exhibit hall that may arise as a result of actions or omissions of the Exhibitor, its employees or agents. The exhibit hall, Show Management and/or NATE will not be liable to the Exhibitor, its employees, agents or guests for any damages, loss or injury from fire, electricity, water, storm, riot, smoke, theft, accident or any other cause. If required by the Exposition facility, the Exhibitor agrees to provide insurance coverage for personal injury and property damage liability covering the Exhibitor and his property in such amount as the Exposition facility requires. Insurance protection against fire, theft or damage to the Exhibitor's materials must be carried at the Exhibitor's expense.

8. Taxes and Fees

Exhibitor assumes responsibility for all state, federal and local taxes associated with sales activities. Exhibitor assumes responsibility for all licensing in association with any use of copyrighted material.

9. ADA Compliance

The Exhibitor understands that the Americans with Disabilities Act (ADA) requires that its display must be accessible to persons with disabilities, and the Exhibitor agrees that it is solely responsible for assuring that its display complies with the ADA.

The Exhibitor hereby warrants that it will provide auxiliary aids and services to individuals with disabilities suitable for effective communication between all parties in accordance with the requirements of the ADA, so that the Exhibitor's display will be accessible, as defined in the ADA, to persons with disabilities. The Exhibitor further warrants that where the provision of such auxiliary aids would fundamentally alter the nature of the goods and/or services provided by the Exhibitor, or would result in an undue burden to the Exhibitor, the Exhibitor will notify NATE of that fact at least two weeks in advance of the exposition and of the alternative measures it intends to take to assure compliance with the ADA during the period of the exposition.

The Exhibitor agrees to indemnify and hold Show Management and NATE harmless for any claims arising out of or in connection with the Exhibitor's display's failure to comply with the ADA.

10. Installation and Dismantling

Exhibitors have move-in and move-out times as indicated in the NATE 2005 exposition information. Failure to remove an exhibit in the allowed time will afford Show Management the right to remove and place same in a warehouse, subject to the Exhibitor's disposition, with all charges to follow at no liability to Show Management. All exhibits must remain intact until the Exposition is officially closed.

11. Gifts, Contests, Food and Beverage

Show Management reserves the right to prohibit, limit or discontinue the distribution of gifts, give-aways or similar promotions. Contests, raffles and drawings, if permitted under state or local laws, will be subject to the approval of Show Management. There will be no announcement of Exhibitor's contests, drawings or raffle winners during the exposition. All food and beverage items must be approved, prepared and provided by the Exposition facility.

12. Exhibit Design and Inclusions

Standard 10' x 10' and 10' x 20' in-line booths will be provided with back drape and side rails which must be utilized. No exhibit construction or signage may exceed 8' in overall height on these booths. In-line booths may display actual product in excess of 8' provided the product is not used as signage. Exhibit construction and/or signage may not exceed 12' on perimeter booths. On island booths, no exhibit construction, product or signage may exceed 16' in overall height. Any sign or display exceeding 4' in height must be set back at least 5' from the aisle. All exhibits must remain within the confines of their own spaces and no Exhibitor will be permitted to erect signs or display products in such a manner as to obstruct the view, occasion injury or disadvantageously affect the display of other Exhibitors. One standard 7" x 44" identification sign will be provided for each Exhibitor. All exhibit booths are required to have carpet.

13. Use of Aisles and Common Areas

The aisles, passageways and overhead spaces remain strictly under control of Show Management and no signs, decorations, banners, advertising matter or special exhibits will be permitted in them except by special written permission of Show Management. Uniformed attendants, models and other employees must remain within the booths occupied by their employers. Any and all advertising distribution must be made from the Exhibitor's booth space. The Exhibitor will be responsible to abide by all city fire and safety codes which may be in effect.

Show Management reserves the right to restrict exhibits that may have been falsely entered, or may be deemed unsuitable or objectionable. This reservation applies to noise, persons, apparel, conduct, things, printed matter, or anything of a character that might be objectionable to the Exposition as a whole. Public address systems are specifically prohibited. Electric or electronic amplification of musical instruments is specifically prohibited. Children under the age of 18 are specifically prohibited from being on the trade show floor at any time.

15. Service Organizations

In the interest of making available the best qualified craftsmen in numbers sufficient to handle all of the services necessary for the operation of the Exposition, Show Management has contracted, on an exclusive basis, official contractors to provide such services. Service companies other than the designated contractors will not be allowed to work on the exhibit areas unless specifically authorized by Show Management.

16. Rights in the Event Exposition Is Not Held

Should Show Management elect to cancel the Exposition, Show Management's liability to the Exhibitor shall be the refund of any payments for booth space received. Show Management shall not be liable for any consequential damages which may arise from such cancellation. Should the Exposition be canceled due to circumstances beyond the control of Show Management including, but not limited to, acts of God, acts of war, governmental emergency, labor strike or destruction of exhibit facility, Show Management shall return each Exhibitor's space payment less a pro rata share of costs and expenses incurred.

17. Changes in Floor Plan

Show Management reserves the right to make appropriate changes in the floor plan and booth locations at any time as it deems necessary for the overall success of the Exposition.

18. Outside Exhibits/Hospitality Suites

By executing this contract, Exhibitors agree that their entire exhibit and display will be confined to the exhibit hall and the booth space assigned. This prohibits Exhibitors from displaying products/services and/or other advertising materials in areas outside their booth space such as, but not limited to, parking lots and hotel lobbies. This would include sales closing areas and unauthorized facility tours. The use of NATE and/or Show Management established biliboards for advertising is acceptable. (Exception: Upon Show Management approval of written request, telecommunication satellite earth terminals positioned outside exhibit facility for clear transmission path may be permitted.) Exhibitors, by executing this contract, also expressly agree not to operate hospitality suites during hours in which the Exposition is open or when any official NATE sponsored events are in progress unless otherwise approved by written consent of Show Management.

19. Violations of Rules and Regulations

Violations of these rules and regulations will afford Show Management the right to execute one or more of the following remedies: 1) The Exhibitor may be prohibited from exhibiting at the current year's Exposition and will forfeit all booth payments; 2) The Exhibitor's "points" for the following year's space assignment may be taken away; 3) The Exhibitor may be prohibited from exhibiting at the following year's Exposition. The imposition of one or more of these remedies by Show Management shall not in any way limit available remedies provided in other provisions of this contract or by law.

20. Governing Law and Jurisdiction

This Agreement shall be interpreted and construed, and the legal relations created herein shall be determined, in accordance with the laws of the State of South Dakota without reference to any conflicts of law principles that would require application of the laws of another state. The federal and state courts within Codington County, South Dakota shall have exclusive jurisdiction to adjudicate any dispute arising out of this Agreement. Each party hereto expressly consents to the personal jurisdiction of, and venue in, such courts.

21. Entire Agreement

This contract and the documents executed in connection herewith contain the entire agreement between the parties and supersedes all prior and contemporaneous oral agreements. No promise or agreement that is not expressed in this Agreement has been made by one party to the other and neither party is relying upon any other statement or representation of the other party, its employees or agents. Any addendum or modification hereto or thereto must be in writing and signed by both parties and attached hereto.

NOTICE:

All exhibitors and attendees agree that as of a condition of attending this event they will not engage either directly or indirectly in the activity of soliciting away any existing employees of any member companies during this function. Anyone engaging in soliciting away existing employees during this event will be immediately removed from the event and not allowed to return. Additional consequences of such activities include prohibition from attending future NATE events and the possible revocation of NATE membership where applicable.

31

Housekeeping is an Important Part of Your Job

Your employer is not your mother! What do I mean by that, you ask? I mean, just like when you were young, your mother had to remind you to pick up after yourself. Now that you are on your own, you still need to be told sometimes. Housekeeping is a very important part of your job. Not only does it improve the overall appearance of your shop or work area, it shows that you take pride in where you work. The best way that you can help keep your work place clean is to pick up after yourself! Don't leave it for the next shift or another craft to worry about.

Here are some reasons to keep your work area clean:

- 1. You reduce trip and fall hazards.
- 2. Increased production. You won't have to waste time looking for a misplaced tool. You will always know where your tools are when you put them where they belong after you use them.
- 3. If someone falls because of materials you left on the floor, you will feel guilty because you were a causal factor in the accident. Also, the injured worker may want to remind you of that!
- 4. You reduce a potential fire hazard by removing unneeded combustibles from the work area.

Here are some tips to maintain a clean work area:

- Plan the job. Make a list of the needed tools/ materials. This will help to minimize unnecessary clutter around your work area.
- Develop a routine for cleaning up at the end of the shift or periodically during the shift.
- Do not allow employees to eat, drink or smoke in the work area, not only because of litter problems, but also because of hygiene concerns.
- This is not, by all means, all inclusive. Take responsibility for yourself and your work area. Remember, a clean work area is a productive work area and also enhances safety!

Source: www.toolboxtopics.com

Attention:

- Advertisers;
- · Article Writers; and
- <u>Companies Submitting</u>: News Briefs or Product Showcases

Please contact Deb Moldenhauer, NATE Production Coordinator for more information via tel: 605-882-5865 or 888-882-5865

or email: deb@natehome.com

The Tower Times deadline for submitting:

- · commmittee articles;
- feature articles;
- display & classified advertising insertion orders;
- display & classified advertising materials;
- · news briefs; and
- product showcases

is **always** the first of the month prior to the issue date. If the first of the month falls on a weekend or holiday, the deadline is the next business day. For example, the deadline for the October 2004 issue is Wednesday, September 1, 2004.

All members are encouraged to submit articles of interest as well as new products or news items that are relevant to the tower industry. Photos are also welcome for use on *Tower Times* covers and on the miscellaneous printed items produced by NATE.



The Use of Non-Original Equipment Manufacturers' Components in Certified Aviation Obstruction/Antenna Structure Lighting Systems

he FAA has recently learned of a situation that may degrade aviation safety. The United States has approximately 44,375 antenna structures registered requiring lighting and/or marking. Antenna structures from 200 feet to 500 feet tall number approximately 40,000, and broadcast type antenna structures from 501 feet to 2,000 feet tall number approximately 4,375. All of these structures are subject to maintenance. In some cases, during antenna structure lighting maintenance certified lighting systems are being modified by replacing internal components with untested non-original equipment manufacturers' (non-OEM) parts. Strobe light manufacturers have reported through replacement lamp tracking that at least 8,000 antenna structures in the 200-foot to 500-foot category have untested and unverified lamps in current operation. All obstruction lighting system manufacturers have indicated a similar problem in regard to replacement of critical components through their warranty programs. Original equipment is certified under Advisory Circular 150/5345-53B, the Airport Lighting Equipment Certification Program (ALECP), which ensures the safety of United States airspace by third party laboratory testing of lighting systems and compliance with the requirements of AC 150/5345-43E, Specification of Obstruction Lighting Equipment. AC 150/5345-43E is, by reference, included in Title 47 CFR Sec. 17.23.

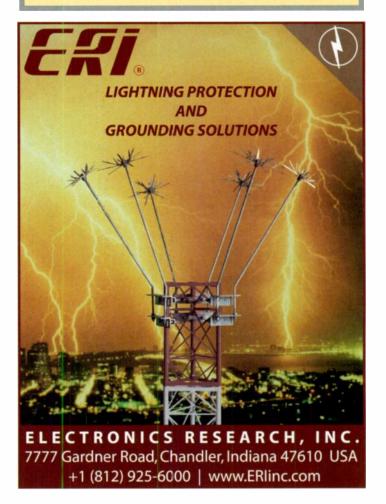
Production testing and compliance by certified OEM's of obstruction lighting systems and components is a requirement of ALECP. Manufacturers of systems not certified in accordance with AC 150/5345-53B cannot guarantee the compliance of their products or components. Through discussions with obstruction lighting maintenance companies, it is apparent that some antenna structure owners are unaware of these potential violations of Title 47 CFR Sec. 17.23. However, antenna structure owners must keep a record of lighting inspections, which include the date, time, and nature of adjustments, repairs, or replacements made (Title 47 CFR Sec. 17.49(d)). The only way to ensure compliance with AC 150/5345-43E is to utilize original equipment manufacturers' parts or their authorized parts providers. It is FAA policy that aviation obstruction lighting systems that have been serviced using non-original equipment manufacturers' parts are no longer in compliance

with FAA specifications of FCC regulations. To ensure United States air navigation safety, this notice is being issued to alert owners of registered antenna structures of required maintenance procedures.

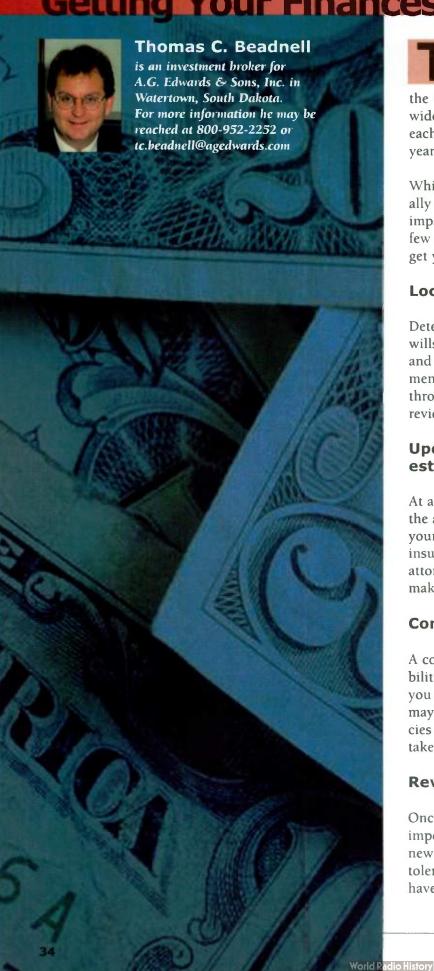
For further information contact: Rick Marinelli, Manager, Airport Engineering Division (AAS-100), Federal Aviation Administration, 800 Independence Avenue SW, Washington, DC 20591; tel 202-267-7669.

Source: Department of Transportation, Federal Aviation Administration

Humor is a good way to prevent a hardening of the attitudes!
- JOEL GOODMAN -



Getting Your Finances in Order After the



here are many tough subjects we avoid thinking about and the death of a spouse could be one of them. According to the U.S. Bureau of the Census, almost half of the women over age 65 are widows. Nearly 700,000 women lose their husbands each year and will be widows for an average of 14 years.

While losing someone you love is obviously emotionally difficult, the loss of a spouse may have substantial impact on your financial situation as well. Here are a few considerations you should think about in order to get your finances in order after a loss:

Locate all important documents.

Determine the location of key documents such as wills, trust documents, insurance policies, deeds, stock and bond certificates and bank and brokerage statements. Having these handy will help in sorting through what documents need to be re-titled and reviewed.

Update beneficiary designations and estate plan.

At a time like this it is important to ensure you have the appropriate beneficiaries listed on items such as your IRA, retirement plans, employee benefits and life insurance policies. In addition, you should have your attorney update your will and estate documents to make sure your intentions are reflected.

Complete a net worth statement.

A comprehensive look at your current assets and liabilities -- what you have and what you owe -- will help you have a better look at your financial situation. You may have some cash coming in from insurance policies and you may also have some debts that need to be taken care of.

Review your asset allocation.

Once you take a snapshot of your finances, it is important to make sure your investments reflect your new situation. You may need to reevaluate your risk tolerance now and your need for liquid assets may have changed. Your financial consultant can help you

Loss of a Spouse

take a look at your portfolio and make any necessary changes.

Inform children of changes to financial structure.

Your children -- and possibly even grandchildren -- should know about any changes you make to your estate plan, will or beneficiary designations. It is important to keep them apprised of your financial decisions -- not only do they have a vested interest, but they may also be able to help you with any difficult decisions.

Review your investment portfolio.

Look closely at your investments to see if they match your financial goals, time horizon and risk tolerance. What may have worked for you as a couple may not be the best choice for you as an individual. Your financial consultant can help in evaluating any shifts necessary in your investments.

Check your credit reports.

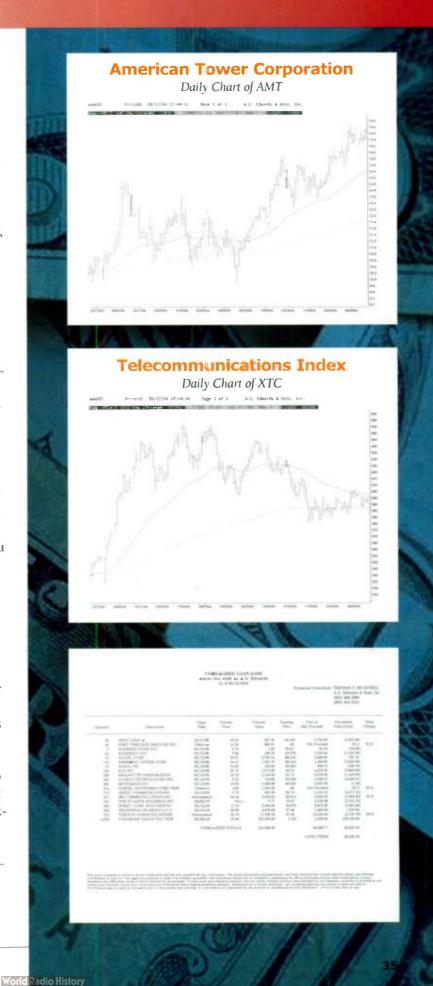
You'll want to get copies of your credit reports and ensure they are accurate. If there are any mistakes, it is important to correct them at once. You may also want to cancel some of your credit cards if you no longer have a need for them. This could help decrease the chances of negatively affecting your credit rating.

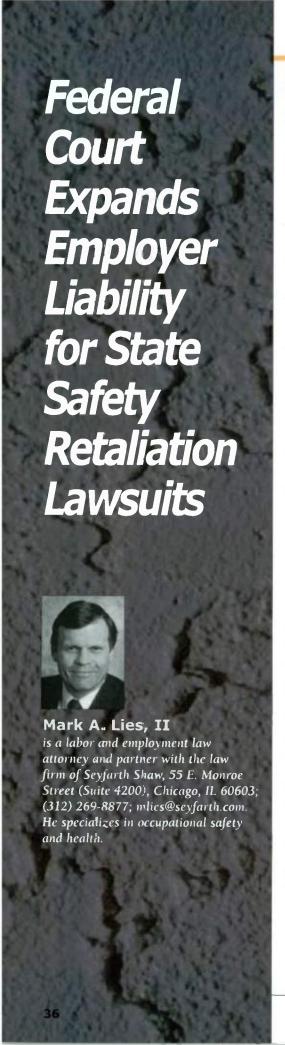
Establish an emergency cash fund.

If you don't have one already, now is the time to establish an account that allows you to access your cash at any time. You may need to tap into this account should you have any unexpected expenses and it will provide you with a bit of freedom.

As you can see, there are several things you can do even during this difficult period to make sure your finances are properly taken care of. A forward-looking plan will help you establish a solid financial future. TT

On the Web: www.agedwards.com





ntroduction

As most employers are (or should be) aware the Occupational Safety and Health Act (Act) 29 U.S.C. § 651, et seq. prohibits retaliation (such as discharge or discrimination) against an employee who exercises rights protected under the Act on behalf of himself or others which can include:

- making a safety complaint to the employer;
- making a safety complaint to OSHA; participating in an OSHA inspection or testifying against the employer in an OSHA enforcement proceeding

(Section 660)

Current OSHA Anti-Retaliation Protection

These rights are based upon Section 11(c) of the Act. When an employee makes a complaint to OSHA under Section 11(c) (in a state under federal OSHA jurisdiction), OSHA utilizes trained investigators, following established guidelines, to conduct an investigation. The investigation may include employee interviews and subpoena of employer documents. Under this system, OSHA determines whether the retaliation complaint has merit, and if so, the Secretary of Labor (and not the individual employee) has the right to bring an action against the employer in federal court, seeking monetary and other relief.

Under the Section 11(c) process, OSHA also has the right to dismiss the complaint if it does not find that it has merit. Unless the employee appeals this dismissal, and is successful, the claim is barred. Section 11(c) also requires that the employee make the complaint in a timely fashion (within 30 days of the adverse action) or the claim is barred.

The federal statutory scheme, outlined above, has existed for over thirty years and has provided some measure of protection to employers against frivolous or unfounded retaliation claims.

Federal Court Creates Employee State Rights

Recently, the Federal Eighth Circuit Court of Appeals, which has jurisdiction over federal courts in Iowa, in the case of Kohrt v. Mid American Energy Co., (8th Cir. Apr. 13, 2004) (Nos. 03-1514, 1587) greatly expanded employee rights under Iowa state common law to sue their employers for alleged retaliation. In so doing, the Court bypassed the specific provisions in the Iowa Occupational Safety and Health Act which contains the same anti-retaliation protections contained in the federal Act discussed above. The Court also totally bypassed the obligation of the employee to file a timely complaint with the Iowa Commissioner of Labor and the right of the Commissioner to determine, after investigation, whether to bring an action in court.

Relying upon a general statement of public policy in the Iowa law, the federal court decided that the Iowa Supreme Court would recognize such a private report of action by the employee, totally outside the scope of the Iowa Act.

New Significant Potential Employer Liability

As a result of this action, employers in lowa are now faced with significant additional potential monetary liability. In Kohrt, the plaintiff was a former safety and training coordinator who was fired in December 1998 because he failed to communicate with his supervisor and to follow directions. The plaintiff claimed that he was terminated for preparing a written statement in May 1998 in which he identified potential safety hazards involving electrical utility linemen. The case proceeded to trial before a jury twice. In the first trial, the plaintiff was awarded \$720,000 in damages for wrongful discharge. At the retrial, he was awarded \$920,000.

Potential Impact in Other States

The action taken by the Circuit Court of Appeals is disconcerting for several reasons. First, it involves a federal court in effect creating state anti-discrimination rights for employees, under state law, before the Iowa Supreme Court recognized such rights. Second, the decision completely overrides the state framework in its law to handle and screen such discrimination claims. Third, the statutory language in the Iowa law, which the Circuit Court of Appeals disregarded as a limitation on these new retaliatory discharge claims, is very similar to that found in most state occupational safety and health laws, thus opening the door for the creation of similar employee rights in other jurisdictions.

Further troubling is the fact that juries, and not the various state agencies envisioned under the exist-

ing laws, will now be considering technical, safety and health regulations and deciding whether there has been some form of retaliation.

Recommendations

In order to limit employer liability under existing law (or a court

expansion of them as occurred in <u>Kohrt</u>), employers should take the following actions:

 create a written anti-retaliation policy or statement in the employee handbook or other documents;

e ground ur **ALT's Rotatable Antenna Mount Assembly for 3 Antennas** #2116R Series Tower Components • Electrical • Grounding · Lightning Protection · Custom Metal Fabrication www.altfabrication.com 800-950-7933 **Manufacturing and Distribution Centers** · Dallas / Fort Worth · San Antonio, Texas

Federal Court

- encourage employees to bring safety and health complaints to the employer without fear of retaliation:
- acknowledge employee safety or health complaints, some of which may be inarticulate, so supervisors must be trained to identify these potential complaints to trigger an investiga-
- investigate the alleged complaint and communicate with the employee as to the outcome of the investigation (e.g., no basis for hazard; corrective action taken, etc., as appropriate); and
- when considering adverse employment action (discipline, termination) against an employee who has engaged in "protected" activity, ensure that the action can be independently supported with objective, nondiscriminatory, documented evidence (e.g., poor performance; absenteeism; insubordination, etc.)

Conclusion

This decision potentially represents a significant new employer liability (especially in Iowa) and in other states, if the other federal and state courts adopt the rationale in the Kohrt decision and expand employee rights to bring such actions outside the existing statutory framework.

The author welcomes inquiries from employers who may need assistance in developing and administering anti-retaliation policies and defending against such claim. TT

Product SHOWCASE **Monobloc Connectors** Eupen Cable Monobloc Connectors are rugged, dependable, and have a solid track record of electrical performance. The most important features of their connectors are: low reflection coefficient (up to 3GHz), low PIM (162dBc), high contact force and CU-BE inner contacts, silver plated, watertight (IP67), and corrosion resistant.

Eupen connectors are designed to meet the standards of normalized N type and 7-16 DIN interfaces. All connector conducting components are silver plated to minimize insertion loss and passive intermodulation products.

Mechanical components are nickel plated for heavy duty handling and best corrosion resistance. Eupen connectors are user friendly with a quick trimming tool for cable preparation and easy installation. Data sheets on all of Eupen's connectors are available on their web page at www.eupen.us.

Eupen Cable USA

5181 110th Avenue, Unit D Clearwater, Florida 33760 Tel: 800-419-5100 www.eupen.us



Polyester Monster Edge® Slings

Lift-It Manufacturing Co., Inc. has recently introduced Polyester Monster

Edge® Slings for use in the rigging and material handling industry. Two materials, Polyester webbing and Monster Edge® technology have been joined together. The patented, specialty edge yarns featured in Monster Edge webbing are an integral part of the sling, providing extended service life as edge abrasion is significantly reduced. Polyester webbing provides "the body" for the Monster Edge" technology and stretches at only half the rate of nylon. Polyester webbing also does not lose strength when wet. Nylon slings lose approximately 15% of their strength when wet.

Lift-It® Manufacturing Co., Inc.

4780 Corona Avenue Los Angeles, California 90058 Tel: 323-582-6076

www.lift-it.com





In addition, the following items are available for

· Carhartt® Jackets

purchase:

- Sweatshirts
- · Travel Bags
- · Back Packs
- · Polo Shirts
- · Twill Shirts
- Pullover Sweaters
- · T-Shirts (3/4 Sleeve Length)
- License Plate Frames

For complete details regarding inventory, sizing and pricing, please contact:

Carol Coughlin Membership Coordinator

Call Toll Free: 888-882-5865

or Email: carol@natehome.com



Executive NATE Logo Portfolio

- notepad, pen holder, five built-in ID/business/ compartment, velcro secured folders, and
 - · Measures 10" x 13.5" x 1.5"



Don Doty serves as Chairman of the NATE OSHA Relations Committee as well as Vice Chairman of the Association. He is the Vice President of Doty-Moore Tower Services. Inc. of Cedar Hill, Texas and can be reached at 215-631-1300 or don.doty@ stainlessinc.com

June 8th article from Bill English's electronic safety newsletter contained this assessment of leadership. Leadership is:

- Doing the right things (that's strategy, a cerebral evaluation of what needs to be done); and
- Doing things right (that's tactics, which is

I submit to you that NATE has and will continue to provide leadership in the most troubling of issues that face our industry.

NATE, on behalf of its members and the industry at large, is currently taking a leadership role in three important activities:

- Bringing the Region V, NATE/OSHA Partnership to the national level;
- Creating an OSHA tower standard through

efforts of the Tower Erection Work Group through the Advisory Committee on Construction Safety and Health (ACCSH);

Reviewing the North Carolina Tower Standard.

Talks were held the last week of June on the next steps in bringing the successes of the Region V partnership to national prominence. A goal to debut a National NATE/OSHA Partnership by the end of this year was established. Hard work by both groups enabled this to happen in three years'

I've written a number of times about the North Carolina Department of Labor, the state run department of Occupational Safety and Health Administration (NCDOL-OSHA) and the preparations for its version of a Communication Tower Standard. Many believe this work may be the draft of a national standard. Through NATE and its many members who've worked side by side with the NCDOL over the course of several years, this new standard should be a defining moment in setting tower-specific rules.

Participants of the ACCSH Tower Erection Work Group met twice in Washington, DC, once in May and again in June. Vicki Dahl, NATE Resource Coordinator and Patrick Howey, NATE Administrator gathered a fantastic assembly of industry "best practice" guidelines. The enormous amount of information was winnowed down to a threeinch notebook, which will be distributed to the members of the ACCSH tower work group for further refining. The finished product will be used as guidelines to characterize the best practices of the tower industry.

All three of these efforts illustrate the enormous amount of work that has and continues to be generated by tower professionals not content to sit on the sidelines and complain.

Safety is more than just talking about it.

We must all live by our actions and with safety that translates into reducing accident and injuries in every way possible. Tr



Has Your Company...



- Changed location?
- Changed the NATE contact person?
 - Changed area codes?
- Added a new website or e-mail address?
- Made any changes that the NATE office should know about?

The NATE Administrative Staff needs this updated information as soon as possible to ensure each NATE member receives Tower Times, important membership updates and information, etc. in a timely manner.

Changes may be submitted on the NATE website at www.natehome.com/contactNATE.cfm or by completing and returning the form below.

Updated Member Information

Company		
Contact Name		
Address		
City	State	Zip
Phone	Fax	
E-mail		

Mail or Fax to: NATIONAL ASSOCIATION OF TOWER ERECTORS

8 Second Street SE • Watertown, SD 57201-3624 Tel: 605-882-5865 or 888-882-5865 • Fax: 605-886-5184

Reminder

The National Association of Tower Erectors membership list is one of the many **benefits** available to NATE members. Therefore, under **NO** circumstances should the NATE member list be sold or distributed to <u>non-member</u> companies.



The same holds true for NATE Safety & Educational Materials.
Under **NO** circumstances can these materials be sold, loaned, or distributed to <u>non-member</u> companies since they are one of the many **benefits** of being a NATE member.

Thank You!

Name		
Company	 	
Address		
City State Zin		

Place Stamp Here

National Association of Tower Erectors 8 Second Street SE Watertown, SD 57201-3624



How to Survive an OSHA Inspection

Larry Z. Sherman, CSP, CPCU, ALCM

As an employer, you know only too well that an OSHA compliance officer could arrive for an unannounced inspection at your company or work site at any time. You need to know what is likely to trigger an inspection, what you need to do in advance of an inspection to be prepared, what you can and should do (and not do) during an inspection, what your rights are as an employer, and what to do if you receive any citations and proposed fines as a result of an OSHA inspection.



SHA's Right To Inspect

OSHA has rather broad powers under the Occupational Safety & Health Act to conduct inspections. The Act allows OSHA "to enter without delay and at reasonable times any factory, plant, establishment, construction site, or other area, workplace or environment where work is performed by an employee of an employer; to inspect and investigate during regular working hours and at other reasonable times, and within reasonable limits and in a reasonable manner, any such place of employment, and all pertinent conditions, structures, machines, apparatus, devices, equipment and materials therein; to question privately any employer, owner, operator, agent or employee; and to review records required by the Act and regulations published in this chapter, and other records which are directly related to the purpose of the inspection."

An employer does have a right to refuse to allow an OSHA compliance officer entry and to require that they obtain a warrant.

However, it is rarely a good idea to exercise this right as it sets up a very adversarial relationship. OSHA will have no trouble obtaining the warrant and they do not have to show "probable cause" or any reason to do the inspection. The OSHA Act gives them the right to enter without a reason. It is better to be cooperative and allow the inspection without any delay.

What Triggers OSHA Inspections?

Approximately 60% of OSHA inspections are triggered by employee complaints. Therefore, it is in your best interest as an employer to respond in a positive manner to any concerns, complaints or input you receive from your employees concerning safety so that they do not feel the need to go to OSHA with the complaint.

Another trigger for an OSHA inspection is a work-related fatality, serious injuries for which emergency medical help is summoned, or accidents/exposures which involve a number of employees. In many cases, OSHA is notified of

such accidents by the local emergency response personnel (police, fire, rescue, ambulance services).

OSHA also targets specific industries which have had a high incidence rate or which are likely to have serious injuries, illnesses and deaths from accidents. Examples of such target programs are those directed at the construction industry, excavation & trenching operations, nursing homes, and certain types of manufacturing operations. In the past few years OSHA has also had a program targeting specific companies in manufacturing sectors based on the accident information those companies have been required to submit to OSHA. If you receive a letter from OSHA telling you that your accident information has placed you on the list of targeted companies, you will want to be well prepared for an inspection.

What To Do Before You Are Inspected

The time to worry about an OSHA inspection is not when the compliance officer knocks on the door! If you are in substantial compliance

41

How to Survive an OSHA Inspection

with OSHA requirements you do not need to be overly concerned about being inspected. If you are prepared, any citations and fines will be minor.

Some of the things you need to be sure you have in place and have done include:

Make sure all managers and supervisors know what to do in the event of an OSHA inspection and know where OSHA documentation & records are located:

- Have OSHA Injury/Illness logs readily available for the past 5 years as well as this year's log kept up to
- Have all of the required written safety programs in place and readily available; and
 - Conduct all required safety training and have documentation to prove

Custom Fabricators 888 778-2758

Call for our 2003 products catalog today. Now available on CD or in paper back. The full color version in PDF can be viewed or down loaded from our web site at: www.towerbrackets.com



and BTS load frames.

How to Handle the Inspection

As noted above, don't require the OSHA compliance officer to get a warrant. Greet them cordially and set a tone of cooperation. Ask what they would like to see or do. They will most likely want to start with a review of your OSHA Injury/Illness logs, written safety programs, and training records.

If the inspection was triggered by an employee complaint, the compliance officer may just want to go to the area of the premises that involves the complaint. If satisfied with what they find there and with your responses, they may not go any further and may not do a full inspection. It is in your best interest to take them to the location in question by the most direct route. The compliance officer has a right to expand the inspection into other areas if they observe hazards or unsafe practices on the way to the site of the complaint so choose your route carefully. There is no reason to take them through the most hazardous areas of your facility or work site.

As an employer you have a right to have a management representative accompany the OSHA compliance officer on the inspection. The compliance officer may also have an employee representative accompany them. Be sure you have someone from management accompany the compliance officer and

take notes of everything that is discussed and any potential violations the compliance officer points out. You have a right to take photos or video anything that the compliance officer takes photos or video of and you should do it if possible. Ask the compliance officer to send you copies of any photos or video they take.

Don't admit to any violations. Don't "agree" with the inspector that a hazard or violation exists. Don't "argue"

with the compliance officer; you can disagree and point out why you don't agree but don't push the issue during the inspection, there will be time to do that after you get any citations or proposed fines. Be truthful, answer questions but don't elaborate more than is necessary, just keep answers simple and stick to the facts. Don't provide copies of safety rules, minutes of safety committee meetings, safety inspection records, or other such internal documents. OSHA does not have a direct right to those documents but can subpoena some of the documents if they need them. However, they often don't subpoena the records if they are not provided voluntarily.

Do allow the compliance officer to review or get copies of documents and recordkeeping materials that are required by OSHA standards such as the OSHA Logs and written programs such as Hazard Communication, Lockout/Tagout, etc. Do ask the compliance officer if he or she believes a condition is a violation and why. Do take notes of everything that occurs during the inspection. Do allow the compliance officer to interview employees without a management person being present as they have a right to do that.

At the completion of the inspection the compliance officer should do a "closing conference". The OSHA Act is very clear that "At the conclusion of an inspection, the Compliance Safety and Health Officer shall confer with the employer or his representative and

informally advise him of any apparent safety or health violations disclosed by the inspection. During such conference, the employer shall be afforded an opportunity to bring to the attention of the Compliance Safety and Health Officer any pertinent information regarding conditions in the workplace." You should be aware that many OSHA compliance officers do not follow this requirement and will try to leave without having to discuss the results of the inspection with management.

Borrow our Clothes

RF protection garments whenever you need them . . . and only when you need them.

RF Garment Leasing by UniTech

Radiofrequency radiation protection is an increasing reality at tower sites nationwide. Until now, this meant making a substantial investment in RF protection equipment.

Enter UniTech, a forty-five year international leader in protective clothing managment. As specialists in laundry services and garment leasing, we offer lease programs as a reliable, convenient, and economical alternative to purchasing RF protective clothing.

We ship clean, certified garments directly to your work site, complete with a return shipping label. Your crew simply packs them up after use and sends them back. No cleaning, no inventory, no headaches. And you'll find it a breeze to bid the cost of garment use into your proposals.

UniTech leases and sells OSHA and FCC-acknowledged RF garments backed by over 15 years of field and lab testing. We also offer personal monitors and warning signs, as well as training and consulting services.

Give us a call or visit our web site to learn more.



295 Parker Street PO Box 51957 Springfield, MA 01151

A subsidiary of Unifirst Corporation RF Division (Texas) Phone: (972) 899-3325 Fax: (972) 899-3313

E-Mail: solutions@unitech-rf.com Web: www.unitech-rf.com

How to Survive an OSHA Inspection

They try to avoid any uncomfortable confrontations. Do not allow this to happen. Ask for a "closing conference" and ask what violations or citations the compliance officer anticipates as a result of the inspection. Take notes. There should not be surprises when you get your citation letter later. If there are, be sure to discuss it with the Area Director when you have your informal conference as described below.

What to Do if You Receive Citations and Proposed Fines

If the OSHA Area Director having jurisdiction over your location determines from the inspection report that there have been any violations of OSHA standards or the General Duty Clause, they will issue a letter with the citations and proposed penalty for each citation. You will receive the letter by Certified Mail or by personal service by an OSHA representative.

Upon receipt of any citation under the Act, the employer must "immediately post the citation, or a copy thereof, unedited, at or near each place an alleged violation referred to in the citation occurred, except as provided below. Where, because of the nature of the employer's operations, it is not practicable to post the citation at or near each place of alleged violation, such citation shall be posted, unedited, in a prominent place where it will be readily observable by all affected employees."

You have only 15 working days to respond in writing if you wish to contest any of the citations or proposed fines. Do not delay. Decide what citations, if any, you want to contest. Call the OSHA Area Director's office immediately and request an informal hearing with them to discuss any citations that you believe should not have been issued or for which you feel the amount of the fine is excessive.

Even if you get an appointment for an informal hearing, do not fail to send a letter to the Area Director within the 15 working day period indicating which citations you want to contest. If you miss the deadline by even one day, you will not be able to contest the citations and must abate the hazards and pay the fines.

Summary

If you are well prepared and in substantial compliance with OSHA standards, you do not really need to be overly concerned about being inspected. Make sure you listen to your employees' concerns about safety so they don't feel the need to go to OSHA with their complaints since that is what triggers a lot of inspections. Know what to expect if you are inspected, what rights you have as an employer, how to handle the inspection process, and what to do if you are cited for any violations and face any fines.

Larry Sherman is the president of Sherman Safety Management, an independent safety consulting firm located in New Port Richey, Florida. He can be reached at 727-372-4540 or by e-mail at LZSherman@shermansafety.com or by visiting his website at www.shermansafety.com





WASHINGTON WIRE





Jim Goldwater is a Vice President at Bob Lawrence & Associates. For further information, he can be contacted at Bob Lawrence & Associates' office at 345 South Patrick Street, Alexandria, Virginia 22314. Tel: 703-836-6196:

s Election Day quickly approaches, the American people will again decide not only who will serve in the White House, but who will serve in the House of Representatives and the Senate as well. Although we are still several months away from November 2, current polls suggest that control of the White House and both houses of Congress likely will be decided in very close races.

Having said that, and in light of a series of meetings at which I've recently joined members of NATE's Legislative and Regulatory Committee, I thought I'd devote this month's article to an introduction to the current hierarchy of the key committees which are expected to review federal telecommunications law next year. (I could have written about what we've been continuing to do on migratory birds, and with whom, but I decided to write about a different topic this month.)

Of course, the election could lead to changes in committee leaders. In fact, we already know of at least one major change, as South Carolina Senator Ernest Hollings, the ranking Democrat on the Senate Commerce, Science and Transportation Committee, will be retiring at the end of the 108th Congress. Nevertheless, he remains a top figure on the panel, and it is anticipated that key members of his committee staff may well remain even after he leaves.

The Senate Commerce, Science and Transportation Committee is chaired by Arizona Republican John McCain, who readers will undoubtedly recall ran for the GOP presidential nomination four years ago.

A member of the Senate since 1986 after four years in the House of Representatives, he actually opposed the Telecommunications Act of 1996, explaining that his principal objection to the Act was that 'it fundamentally regulated, not deregulated, the telecommunications industry and would lead inevitably to prolonged litigation. (S)ince the passage of the Act...consumers have yet to benefit from lower prices or a competitive marketplace as promised by the Act's proponents. I believe that Congress must face reality, and deal realistically, with these obvious problems." (He noted two years ago that local telephone and cable rates had risen dramatically, and that some companies were raising rates on basic long distance service.)

The following is an excerpt from a McCain statement on a bill he introduced, the "Telecommunications Ownership Diversity Act of 2003," in which he discussed his effort to broaden ownership opportunities:

"This legislation is designed to ensure that more Americans have an opportunity to provide their distinct voices in today's telecommunications marketplace. In addition to providing competition by certain small businesses, this bill would encourage ownership by individuals who are currently under-represented in the ownership of telecommunications companies, including minorities and women, by making carefully crafted changes in the tax code. The bill would institute market-based, voluntary measures designed to achieve this goal. It would provide sellers of telecommunications assets a tax



WASHINGTON WIRE

deferral when those assets are bought for cash by certain small businesses. It also would provide investors an incentive to consider certain small businesses by providing a reduction in the tax on gains from investment in these companies...The goal of viewpoint diversity has been at the center of recent debate over media ownership rules. While it is important to discuss the relative merits of ownership restrictions, we also must consider market-based. voluntary methods of facilitating entry and diversity of ownership. And that's what this legislation would do."

McCain has also introduced legislation to streamline the process of paying federal agencies to relocate from government spectrum that has been reallocated to commercial use; and to provide Americans with more broadband choices by ensuring that the market, not government, regulates the deployment of broadband services.

Conrad Burns (R-MT) heads the Communications Subcommittee, one of the key regulatory posts in Congress. In that position, Burns, a former broadcaster, has generally favored deregulation and encouragement of Internet commerce. According to The Almanac of American Politics, he favored allowing the regional Bells into long-distance service, a key feature of the 1996 law. He also wrote its Section 706, providing incentives for broadband data networks. Burns was first elected to the Senate in 1988.

As noted, Ernest Hollings is the top Democrat on the full committee as well as on the Communications

Subcommittee. He has been in the Senate for 38 years, although he has been South Carolina's senior senator for only two (following Strom Thurmond's retirement after 48 years, the longest tenure of any senator in history). As the former chairman of the committee, he has been extremely active on telecommunications issues. As The Almanac notes, he has been the chamber's most persistent backer of telecom reform, for more competition between long distance companies and the regional Bells. He had been the major opponent of deregulating broadcasting and a major proponent of the Cable Regulation Act of 1992.

At this time, other members of the subcommittee are Republicans Ted Stevens (AK), Trent Lott (MS), Kay Bailey Hutchison (TX), Olympia Snowe (ME), Sam Brownback (KS), Gordon Smith (OR), Peter Fitzgerald (IL), John Ensign (NV), George Allen (VA), and John Sununu (NH), and Democrats Daniel Inouye (HI), John Rockefeller (WV), John Kerry (D-MA), John Breaux (LA), Byron Dorgan (D-ND), Ron Wyden (OR), Barbara Boxer (CA), Bill Nelson (FL), and Maria Cantwell (WA).

On the House side, the Energy and Commerce Committee is chaired by Joe Barton (R-TX), who ascended to the top spot this year after Billy Tauzin (R-LA) stepped down in anticipation of his upcoming retirement. Barton, first elected to the House in 1984, previously advocated deregulation (electricity) because of inconsistent state plans. As a founding member and co-chairman of the Congressional Privacy Caucus, he has worked to preserve Americans' financial and medical

privacy, and has in particular used his role as one of Congress' "technology policy players" to promote legislation and technology directed at protecting privacy on the Internet.

John Dingell (D-MI) is the ranking Democrat of the committee, which he previously chaired from 1981 to 1995. He is the senior member of the full House of Representatives, having been elected in 1955 to succeed his father, who held the seat from 1933 until his death. He is widely regarded as one of the most powerful and effective House members ever.

In the past, Dingell opposed auctions of certain broadcast frequencies and the radio spectrum auction in 1997, which he criticized as "short-sighted, unwise, counterproductive and stupid."

Dingell is expected to strongly advocate an overhaul of existing telecommunications law to reflect the advances in the modern communications marketplace and the development of new technologies. As he explained, "Such changes are essential if we are to inspire new investments in our networks, create jobs, and rightfully reward those companies who are willing to risk their own capital."

As far as media ownership and related action taken by the Federal Communications Commission are concerned, Dingell said the following:

"The weakening of the FCC media ownership rules will hurt localism, will reduce diversity, and will allow media monopolies to flourish...For years, the

federal courts have upheld the government's ability to regulate media ownership levels in order to protect localism, preserve diversity, and ensure competition in the media marketplace. (The FCC decision) ignores settled law and sacrifices those important democratic values on the ideological altar of deregulation...The battle for a reasoned approach to ownership will now return to the courts, which hopefully will reject this arbitrary action, and to the Congress where a bipartisan coalition has already formed and is prepared to move forward. I look forward to working with my colleagues on both sides of the aisle to enact a national policy that will restore

diversity and competition to the media marketplace."

Fred Upton, a nine-term Republican from Michigan, leads the Telecommunications and the Internet Subcommittee. He is greatly interested in expanding the availability of high-speed Internet access. Another of his top communications priorities is expediting the transition to digital television. As he said,

"Section 309 of the Communications Act...is not about promoting high-definition television directly, but about reclaiming the analog spectrum as soon as possible while minimizing the number of consumers who must take addition-

al steps after the transition to continue watching television.

"Some argue that...expediting the transition...will give consumers less time to replace their analog televisions. But again. consumers will be more likely to purchase digital televisions when faced with the end of analog broadcasts. Moreover, the statute has always contemplated ending the transition with as many as 15 percent of households needing to take steps to continue receiving television broadcasts. The (FCC's) Media Bureau proposal is expected to impact fewer consumers than that, since by the end of 2006 many more consumers will have digital televisions, cable service,



satellite service, or digital-toanalog converter boxes."

The top subcommittee Democrat is Ed Markey (MA), who is in his 14th term in the House. He shares Dingell's concerns over the FCC's media ownership rules, and agrees with Upton on the importance of a reasonable, responsible transition to DTV.

Markey was one of the only members of the committee to fight AT&T's monopoly in the early 1980's and is a principal author of the requirement that the Bell Operating companies accept local telephone service in the 1990's. Other current members of the

Telecommunications and the Internet Subcommittee are Republicans Michael Bilirakis (FL), Vice Chairman Cliff Stearns (FL), Paul Gillmor (OH), Chris Cox (CA), Nathan Deal (GA), Edward Whitfield (KY), Barbara Cubin (WY), John Shimkus (IL), Heather Wilson (NM), Charles Pickering (MS), Vito Fossella (NY), Steve Buyer (IN), Charles Bass (NH), Mary Bono (CA), Greg Walden (OR), and Lee Terry (NE), and Democrats Albert Wynn (MD), Karen McCarthy (MO), Mike Doyle (PA), Jim Davis (FL), Charles Gonzalez (TX), Rick Boucher (VA), Ed Towns (NY), Bart Gordon (TN), Peter Deutsch (FL), Bobby Rush (IL), Anna Eshoo (CA), Bart Stupak (MI), and Eliot Engel (NY).

I will report on any changes in committee and subcommittee membership as well as priorities, agendas, and schedules following Election Day. T

A key function of NATE is the development of a unified industry voice on issues affecting tower erection, maintenance, and service work. Bob Lawrence & Associates serves as the marketing representative for NATE, working with members of Congress, OSHA officials, and others to advance NATE's position in Washington, D.C.

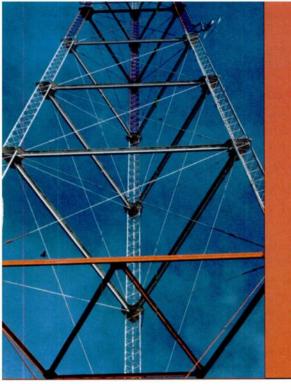
ATTENTION NATE Members

You should have received your July 1, 2004 - June 30, 2005 annual membership dues invoice and renewal form in early June.

The membership renewal form, along with payment, were due in the NATE office by July 1, 2004. You may also visit the NATE website at www.natehome.com to complete the renewal process online. If you have not taken these steps to renew your membership, please do so today.

If you have any questions regarding your membership status, please contact NATE Membership Coordinator, Carol Coughlin, at:

888-882-5865 or carol@natehome.com



Suspension Trauma/ Orthostatic Intolerance

This article provides employees and employers with important information about the hazards of orthostatic intolerance and suspension trauma when using fall arrest systems. This article:

- describes the signs and symptoms of orthostatic intolerance;
- discusses how orthostatic intolerance can occur while workers are suspended following a fall; and
- outlines recommendations for preventing orthostatic intolerance, as well as recommendations for worker training and rescue.

ackground

Orthostatic intolerance may be defined as "the development of symptoms such as light-headedness, palpitations, tremulousness, poor concentration, fatigue, nausea, dizziness, headache, sweating, weakness and occasionally fainting during upright standing" [1,2]. While in a sedentary position, blood can accumulate in the veins, which is commonly called "venous pooling," and cause orthostatic intolerance [3]. Orthostatic intolerance also can occur when an individual moves suddenly after being sedentary for a long time. For example, a person may experience orthostatic intolerance when they stand up quickly after sitting still for a long time.

A well-known example of orthostatic intolerance is that of a soldier who faints while standing at attention for long period of time. The moment the soldier loses consciousness, he or she collapses into a horizontal position. With the legs, heart, and brain on the same level, blood is returned to the heart. Assuming no injuries are caused

during the collapse, the individual will quickly regain consciousness and recovery is likely to be rapid.

Venous pooling typically occurs in the legs due to the force of gravity and a lack of movement. Some venous pooling occurs naturally when a person is standing. In the veins, blood normally is moved back to the heart through one-way valves using the normal muscular action associated with limb movement. If the legs are immobile, then these "muscle pumps" do not operate effectively, and blood can accumulate. Since veins can expand, a large volume of blood may accumulate in the veins.

An accumulation of blood in the legs reduces the amount of blood in circulation. The body reacts to this reduction by speeding up the heart rate and in an attempt to maintain sufficient blood flow to the brain. If the blood supply is significantly reduced, this reaction will not be effective. The body will abruptly slow the heart rate and blood pressure will diminish in the arteries. During severe venous pooling, the reduction in quantity and/or quality

(oxygen content) of blood flowing to the brain causes fainting. This reduction also can have an effect on other vital organs, such as the kidneys [3]. The kidneys are very sensitive to blood oxygen, and renal failure can occur with excessive venous pooling. If these conditions continue, they potentially may be fatal [3].

Description of Hazard

Orthostatic intolerance may be experienced by workers using fall arrest systems. Following a fall, a worker may remain suspended in a harness. The sustained immobility may lead to a state of unconsciousness. Depending on the length of time the suspended worker is unconscious/immobile and the level of venous pooling, the resulting orthostatic intolerance may lead to death. While not common, such fatalities often are referred to as "harness-induced pathology" or "suspension trauma."

Signs & symptoms that may be observed in an individual who is approaching orthostatic intolerance include:

49

Suspension Trauma/Orthostatic Intolerance

- Faintness:
- Nausea;
- Breathlessness:
- Dizziness;
- Sweating;
- Unusually low heart rate;
- Paleness:
- Unusually low blood pressure;
- · Hot flashes;
- "Greying" or loss of vision; and
- Increased heart rate [3,4]

Factors that can affect the degree of risk of suspension trauma:

- Inability to move legs;
- · Hypothermia;
- Pain;
- Shock;

- Injuries during fall;
- Cardiovascular disease:
- Fatigue;
- Respiratory disease;
- Dehydration; and
- Blood loss [3,4]

Unconscious/immobile workers suspended in their harness will not be able to move their legs and will not fall into a horizontal position, as they would if they fainted while standing. During the static upright position, venous pooling is likely to occur and cause orthostatic intolerance, especially if the suspended worker is left in place for some time. Venous pooling and orthostatic intolerance can be exacerbated by other circumstances related to the fall. For example, shock or the experience of the event that caused the fall, other injuries, the fit/positioning of the harness, the environmental conditions, and the worker's psychological state all may increase the onset and severity of the pooling and orthostatic intolerance [3,5]. Unless the worker is rescued promptly using established safe procedures, venous



pooling and orthostatic intolerance could result in serious or fatal injury, as the brain, kidneys, and other organs are deprived of oxygen [3].

The amount of time spent in this position, with the legs below the heart, affects the manner in which the worker should be rescued [3]. Moving the worker quickly into a horizontal position -- a natural reaction -- is likely to cause a large volume of deoxygenated blood to move to

the heart, if the worker had been suspended for an extended period. The heart may be unable to cope with the abrupt increase in blood flow, causing cardiac arrest [3,5]. Rescue procedures must take this into account. Recommended rescue procedures are outlined below.

Conclusions and Recommendations

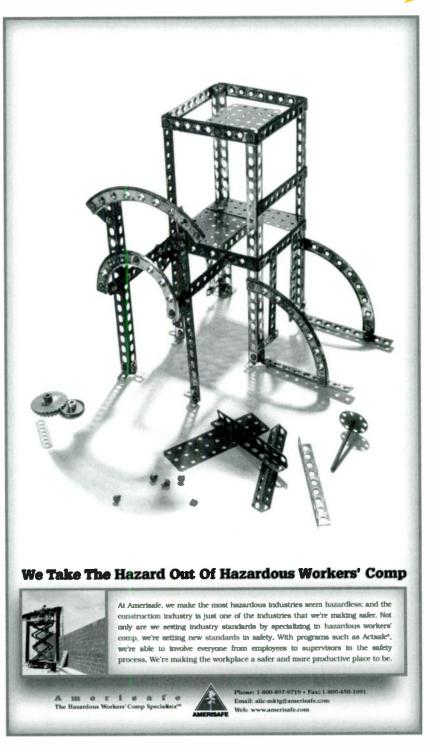
Prolonged suspension from fall arrest systems can cause orthostatic intolerance, which, in turn, can result in serious physical injury, or potentially, death. Research indicates that suspension in a fall arrest device can result in unconsciousness, followed by death, in less than 30 minutes [4]. To reduce the risk associated with prolonged suspension in fall arrest systems, employers should implement plans to prevent prolonged suspension in fall protection devices. The plan should include procedures for: preventing prolonged suspension, identifying orthostatic intolerance signs and symptoms, and performing rescue and treatment as quickly as possible.

OSHA recommends the following general practices/considerations:

- Rescue suspended workers as quickly as possible;
- Be aware that suspended workers are at risk of orthostatic intolerance and suspension trauma;
- Be aware of signs and symptoms of orthostatic intolerance;
- Be aware that orthostatic intolerance is potentially life threatening. Suspended workers with head injuries or who are

unconscious are particularly at risk;

- Be aware of factors that can increase the risk of suspension trauma; and
- Be aware that some authorities advise against moving the rescued workers to a horizontal position too quickly.



Suspension Trauma/Orthostatic Intolerance

Training

OSHA requires employers to train workers to use fall arrest systems and other personal protective equipment correctly while performing their jobs, in accordance with standards 29 CFR 1910.132 (Personal Protective Equipment) 29 CFR 1915.159 (Personal Fall Arrest Systems) and 29 CFR 1926.503 (Training Requirements for Fall Protection).

Workers who wear fall arrest devices while working, and those who may perform rescue activities, should also be trained in:

- How to ascertain whether their personal protective equipment is properly fitted and worn, so that it performs as intended;
- How orthostatic intolerance/suspension trauma may occur;
- The factors that may increase a worker's risk;
- How to recognize the signs and symptoms identified in this article; and
- The appropriate rescue procedures and methods to diminish risk while suspended.

Rescue Procedures

Under 29 CFR 1926.502 (d) (Fall Protection Systems Criteria and Practices), OSHA requires that employers provide for "prompt rescue of employees in the event of a fall or shall assure that employees are able to rescue themselves." This should include identifying rescue procedures that address the potential for orthostatic intolerance and suspension trauma. Rescue procedures also should address how the rescued worker will be handled to avoid any post-rescue injuries.

Rescue procedures should include the following contingency based actions:

 If self-rescue is impossible, or if rescue cannot be performed promptly, the worker should be trained to "pump" his/her legs frequently to activate the muscles and reduce the risk of venous pooling.
 Footholds can be used to alleviate pressure, delay symptoms, and provide support for "muscle pumping."

- Continuous monitoring of the suspended worker for signs and symptoms of orthostatic intolerance and suspension trauma.
- Ensuring that a worker receives standard trauma resuscitation¹ once rescued. Some authorities recommend that the patient be transported with the upper body raised.
- If the worker is unconscious, keeping the worker's air passages open and obtain first aid.
- Monitoring the worker after rescue, and ensuring that the worker is evaluated by a healthcare professional. The worker should be hospitalized when appropriate. Possible delayed effects, such as kidney failure, which is not unusual in these cases, are difficult to assess on the scene.

References

- 1. Robertson, David. Orthostatic Intolerance. Vanderbilt University, Nashville, Tennessee.
- 2. New York Medical College. Orthostatic Intolerance. Vahalla, New York.
- 3. Seddon, Paul. Harness Suspension: Review and evaluation of existing information. Health and Safety Executive. Research Report 451/2002. 104 pp.
- 4. Sheehan, Alan. Suspension Trauma. Training handout.
- 5. Weems, Bill and Bishop, Phil. Will Your Safety Harness Kill You? Occupational Health & Safety. 72(3): 86-88, 90, March, 2003.
- National Association of Emergency Medical Technicians (NAEMT). Provider Textbook section in: PHTLS Basic and Advanced Prehospital Trauma Life Support Fifth Edition St. Louis, MO: Mosby; 2003: Section 1.

Source: Occupational Safety and Health Administration

On the Web: www.osha.gov

A smile is a curve that sets everything straight.
- PHYLLIS DILLER -

www.natehome.com updated weekly

What's New?



RENEW or APPLY for Membership Online

The NATE website is continually changing to benefit visitors to the site.

Companies may now apply for membership online in the Membersip section.

Members may also renew their memberships online in the Members Only section.



If you do not know what your ID number is please contact Carol Coughlin, NATE Membership Coordinator at tel:

888-882-5865 or email:

carol@natehome.com

There are eleven sections on the NATE website, each focused on keeping NATE members informed and also allowing potential members a chance to learn more about the Association.



About NATE

Benefits & Services

-Membership

Tower Times

Annual Events

Regulatory Agencies

Industry Links

Corporate Collection

Contact NATE

NATE Classifieds

- Members Only -

NATE Hoist Standard

Available to download from the Members Only section.





Access information to assist you in sponsoring or exhibiting at NATE 2005.

Safety & Educational Materials

Reminder: These items are a few of the many benefits of being a NATE member; therefore, **ONLY MEMBERS ARE ALLOWED TO PURCHASE NATE SAFETY AND** EDUCATIONAL MATERIALS & STICKERS WITH NO EXCEPTIONS.



Accident Prevention, Safety and Health Program Guide \$100.00

This safety program was designed specifically for the tower industry and is intended to serve as a guide for NATE members to use when developing their own company safety program. Included in the safety program are suggested formats and procedures for fall prevention, hazard identification and tower access, along with samples of a climber exam and evaluation form. As additional procedures and practices are adopted by NATE, revisions and updates will be provided. The NATE Accident Prevention, Safety and Health Program Guide, alone or in conjunction with the series of NATE safety videotapes, is an excellent tool for enhancing your company's safety program.

The safety program consists of the following items:

- Accident Prevention, Safety and Health Program Guide including 18 sections:
 - Safety Policy Statement
 - Recordkeeping
 - Inspection Policy
 - Accident Investigation
 - Respiratory Protection Safe Work Practices
 - Qualified Climber Course
 - Qualified Climber Practical Application Evaluation
 - Hazard Communication and MSDS Program
 - Emergency Response
- 3 Booklets
 - Field Superintendent's Guide
 - Qualified Climber Course 2 booklets
- · Read-only CD

- Hazard Identification
- Education and Training
- Safety Audit
- Alcohol/Drug Policy
- Fall Protection
- Climber Exam
- Personnel Hoisting Regulations
- RF Exposure
- Employer Employee Relationship



The NATE Safety & Education Committee has developed and produced a series of videotapes available to assist members in continued employee education. Additional tapes will be produced as new standards and procedures are adopted by the NATE membership. The safety videotapes, when used in conjunction with the NATE Accident Prevention, Safety and Health Program, are effective tools for augmenting safety programs of member companies. They inform employees of the techniques associated with working in elevated positions and of the many working practices that will help them to do their jobs more safely.



Video #1 - Tower Climber Orientation

\$20.00

This tape will aid in familiarization of the three basic types of towers, the tasks that are typically performed prior to climbing, the responsibilities and roles of the various employees on a tower, how to recognize hazards, how to inspect and wear the necessary equipment, and basic climbing techniques.



Video #2 - Personnel Hoisting

\$20.00

This tape will aid in familiarization of basic hoist specifications and procedures, proper safety equipment, the correct procedures to safely hoist personnel to their work stations on the tower, and proper communications between workers on the tower and hoist personnel.



Video #3 - Gin Pole Procedures

\$20.00

This tape will aid in familiarization of basic hoist specifications and procedures, rigging a gin pole to a tower, jumping the pole, proper use of a tagline, and proper communications between workers on the tower and hoist personnel.



Place your order on page 56 or online at www.natehome.com



Resource Reference for RF Awareness

\$10.00

NATE has available to members a Resource Reference for RF Awareness booklet to guide in educating employees on the issue of radio frequency radiation. It includes a listing of RF publications an employer should maintain on file, a short history of the FCC MPE law, an RF Safety Awareness checklist to be used on a job site, human exposure to RF, OSHA Labor Regulation 1910.147, various related articles and other relevant information.



Suggested Fall Protection - Rooftop Work Area Protocol

\$8.00

This booklet was designed by the Safety & Education Committee to provide member companies with certain guidelines for fall protection on rooftop work areas. Since every rooftop is different, the fall protection system utilized will be as well. The booklet discusses Warning Line Systems, Safety Monitoring Systems, Fall Restraint Systems, and Fall Arrest Systems along with applicable definitions.



Glossary of Tower and Communications Terminology

\$25.00

Produced by the Safety & Education Committee in an effort to bring some uniformity to industry terminology, the booklet is a broad compilation of terminology from companies across the nation to be used by newcomers to the trade as well as experienced individuals. Housed in a three-ring binder, the terminology booklet also comes with a CD for the user's convenience.



Site Signage Package

\$35.00

This package will provide NATE member companies with guidelines for proper OSHA required hazard warning signs for worker information and protection. The package consists of Suggested Signage Protocol - Foreman's Reference Guide and also heavy-duty laminated flipcards to be used on jobsites. Signage recommendations are included for winches, tower or site inspection (includes relamping), rigging the tower, foundation installation, torch/welder/grinder, RF safety, tower erection, installation of antennas and transmission lines, rust treating and painting, maintenance work, working near power lines, fire hazard, and sites with pedestrian and vehicular traffic.



Tower Safety Signals

\$10.00

This booklet was designed by the Safety & Education Committee to provide member companies with guidelines for alternate signaling at tower sites. The booklet discusses audible signals as well as providing visual graphics and descriptions of hoist hand signals, crane hand signals, forklift hand signals, helicopter hand signals, semaphore flag signals and Morse Code. These various styles of safety signals are being used throughout the world.



4" Window Cling-On 25¢ Each



4" Round Sticker 25¢ Each



1" Stickers on a Roll \$25.00

NATE
National Association
Tower Errectors

NEW
12" Round Sticker \$6.00 Each



2" Hard Hat Stickers 35¢ Ea. Sheet

Weather resistant. Perfect for use on vehicles, tool boxes, buildings, etc.



Member Order Form

ITEM	PRICE	QTY	AMOUN'
Accident Prevention Safety & Health Program Guide	\$100.00		
Video #1 - Tower Climber Orientation	\$20.00		
Video #2 - Personnel Hoisting	\$20.00		
Video #3 - Gin Pole Procedures	\$20.00		
Resource Reference for RF Awareness Booklet	\$10.00		
Suggested Fall Protection - Roof Top Work Area Booklet	\$8.00		
Glossary of Tower & Communications Terminology	\$25.00		
Site Signage Package	\$35.00		
Tower Safety Signals Booklet	\$10.00		
4" Window Cling-On (Each)	\$0.25		
1" Stickers (Roll - 250 PER ROLL)	\$25.00		
2" Hard Hat Stickers (Each Sheet - 2 PER SHEET)	\$0.35		
4" Round Sticker (Each)	\$0.25		
12" Round Sticker (Each)	\$6.00		
		Total	
PLEASE TYPE OR PRINT			
Payment Method: U.S. Funds Only ☐ Check Enclosed	□ VISA	☐ MC	☐ AmEx
Credit Card #:	Exp. Date:		
Signature:	Dato		

Payment Method:	U.S. Funds Only	□ Check Enclosed	□ VISA	□ AmEx
Credit Card #:			Exp. Date: _	
Signature:			Date: _	
Name:				
Company Name:				
Shipping Address:				
City:		State:	Zip:_	
Tel:		Fax:		



Email:

National Association of Tower Erectors

8 Second Street SE • Watertown, SD 57201-3624 Tel: 605-882-5865 or 888-882-5865 • Fax: 605-886-5184 Email: vicki@natehome.com

NATE OFFICE USE ONLY
Date Paid:

Materials Sent:

PLEASE ALLOW 5 DAYS FOR SHIPPING AND HANDLING.
Only NATE members are allowed to purchase these items.

Proper Tower Marking

rom the day man first struggled into the sky, flight safety and structure height became intertwined, both figuratively and (sometimes unfortunately) literally. The need for reliable telecommunications and utility systems require structures of significant height – a need that must always be balanced against safety of flight issues.

Tower marking (which by definition includes both painting and lighting) must always be first an issue of human safety, not merely governmental rules and regulations. The cost of lamp replacement and aviation orange paint is insignificant compared to the tragedy of life lost due to an aircraft strike on a tower not properly marked.

Early Tower Lighting

In the very early days of aviation, commercial flights were restricted to daytime operation in good visibility. Landings at airfields were assisted by the use of simple visual signals set out on the ground, or by signaling lamps which indicated to the pilot the direction for landing, permission to take off, and so on.

Of course, at first the existing towers and high structures had no such markings. According to one story, in those days before reliable radiotelephone communication, electronic navigation and GPS, as airfields began to spring up across the nation, red lamps began to be installed atop the rotating airfield tower beacons to provide navigational assistance.

The idea was that each of the towers would flash the Morse identification of the airport itself, so pilots could identify the field from the air. For example, the Indianapolis airfield (IND) might have had a flashing red light that would flash dit-dit, dah-dit, dah-dit, which spells IND in code.

Now, whether or not this is a true tale it does offer an explanation for the term "code beacon," since the first towers to have flashing lamps would have been those beacon towers at airfields, flashing the Morse Code identification of their field! And if you really want to believe this story, then you will understand why the existing specification for flashing code beacons is a repeating letter T (dah), which of course would mean "Tower!"

Regulatory Power

Although the Federal Aviation Administration (FAA) is charged with overseeing flight safety, including marking of towers and other obstructions, the FCC has been granted congressional authority to require marking of antenna towers when it determines that such towers may otherwise be a hazard to air navigation (47 U.S.C.303(q).

The rules of interest are actually based upon advisory recommendations of the FAA as found in the FAA Advisory Circulars, 47 CFR 17.21-17.58. The Obstruction Marking and Lighting Circular is document AC 70/7460 and is available at the FAA website.

The FCC was given the authority to make these FAA advisory recommendations mandatory, and does this by incorporating the FAA standards right into the FCC rules. FCC Part 17, and FCC Forms 715 and 715A contain the FCC requirements relating to tower lighting, and are available on the FCC web site. Therefore, for a full understanding of all the rules pertaining to tower marking, we must look at FCC Part 17, FCC Form 715 and 715A, and then the FAA Advisory Circular which is also by reference incorporated into the FCC rules.

Notification

The FCC always requires an FAA determination of "no hazard" before it will issue a construction permit to build on any proposed or existing tower. That FAA determination, made by the appropriate FAA regional office, takes into account the location and height of the tower and reports its recommendations for any painting and lighting, which the FCC then incorporates into the station construction permit and subsequent license.

Towers that need painting or lighting in order to achieve the "no hazard" determination will be issued an ASR (Antenna Structure Registration) number which, as reported in the previous article in this series [February 2004, Page 8], provides a convenient way for the FCC, the FAA, the station owner, and the general public to quickly identify that particular tower.

But visibility is not the only standard the FAA uses to determine whether or not a proposed tower will be a hazard to flight safety. The FAA also studies the proposed RF signatures for new towers to determine if there might be possible radiofrequency interference with aviation

Proper Tower Marking

communication signals. If such a concern is raised, the FCC then makes an independent analysis to determine how to resolve the issue, and apportions costs to the appropriate parties.

Basic Marking Rules

As mentioned, the basic rules of tower marking come from the FAA Advisory Circulars (47 CFR 17.21-17.58), which generally require that any structure over 200 feet

above ground level be registered and marked (painted and/or lighted). But if the tower structure is located on a flight path to a nearby airport, it may require registration, marking and painting no matter what the elevation above ground level.

The 200-foot rule is not an absolute and there are many shorter towers, such as STL relay towers, that require registration, painting and lighting when located close to airports. If you have any doubts, the FAA has developed

a great resource on the web, which can tell you immediately whether or not a structure requires registration. It is called TOWAIR, and it looks like this:



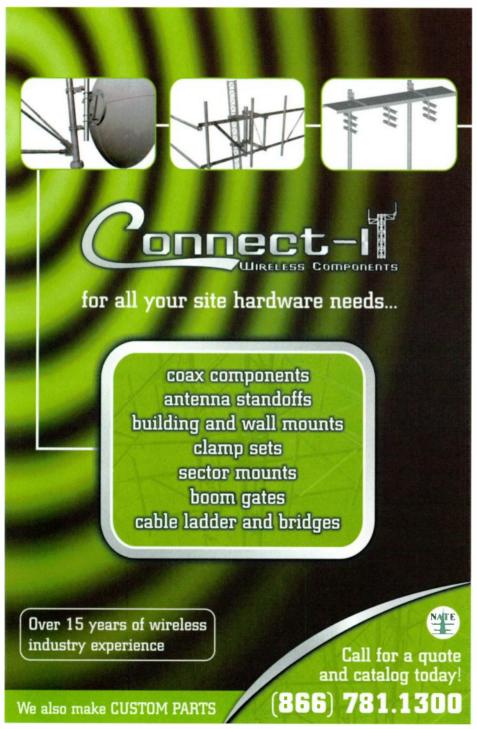
http://wireless2.fcc.gov/UisApp/ AsrSearch/towairSearch.jsp

As long as you know the latitude and longitude, the site elevation AMSL and proposed structure height, this valuable tool can tell you immediately whether or not your proposed tower requires registration and lighting.

Once the FAA and FCC specify the required marking for your tower, the next challenge is to fulfill those requirements. Station operators have three major responsibilities in regard to marked towers: Marking, Monitoring, and Maintenance. We will examine each of these critical areas in some detail.

Marking (Conspicuity)

The essence of tower lighting and marking is to make the structure visible in all weather and lighting conditions. The FAA utilizes the term "conspicuity" to reflect that ideal. A structure may be made conspicuous by paint, lights, or both. Often, painting alone provides the



required daylight conspicuity, while some type of lighting system provides nighttime protection. If medium or high intensity lighting systems (strobes) are used 24 hours per day, the painting requirement is often waived, since the strobes provide protection both day and night.

To paint a tower might seem a simple thing, but there are several issues that are important. First of all, the paint itself must meet Federal Standards. Both the white and red (aviation orange) paint must meet the following standards when applied:

White: Color #17875 Federal Specification FS 595

Aviation Orange: Color #12197 Federal Specification FS 595

The paint is to be displayed in alternate bands of aviation orange and white as follows:

- 1. The bands are to be equal in width, provided each band is not less than 1.5' (.5m) or more than 100' (31m) wide;
- 2. The bands are to be perpendicular to the vertical axis with the bands at the top and bottom ends colored orange;
- 3. There must be an odd number of bands on the structure;
- 4. The bands should be approximately one-seventh the height of the structure if 700' (214m) AGL or less. For each additional 200' (61m) or fraction thereof, add one additional orange and one additional white band;
- The bands should be equal and in proportion to the structure height AGL.

Paint Cables Too

A recent change in the painting requirements specifies that if transmission lines or coaxial cables diminish the conspicuity of the orange and white paint bands then the cables and lines themselves should also be painted like the tower structure. There is some subjective evaluation here, but if the primary color of your tower is black when viewed from any face, then you should paint the coaxial cables and transmission lines to restore the full conspicuity of the orange and white color markings.

Once paint is applied, it should be periodically monitored to insure that the paint continues to offer the required



Proper Tower Marking

conspicuity. Federal standard FED-STD-595 lists the standards for chromaticity and luminance for a freshly painted tower. Those standards require that surfaces should be repainted when the color changes noticeably or its effectiveness is reduced by scaling, oxidation, chipping, or layers of contamination.

Paint monitoring is best done with a color tolerance chart, available from private suppliers; Hale Color Charts of Los Angeles, California is one such supplier and the one with which I am most familiar. [www.halecolor-charts.com]

Note that although the FAA prefers that the paint color

be sampled on the upper half of the tower "since weathering is greater there," a comparison at the bottom of the tower is often just as effective (and a lot more convenient!) A yearly check with a color chart is an effective way to maintain FAA paint standards, while making you aware of the continuous weathering that will eventually require a budgeted repainting.

Nightime Conspicuity

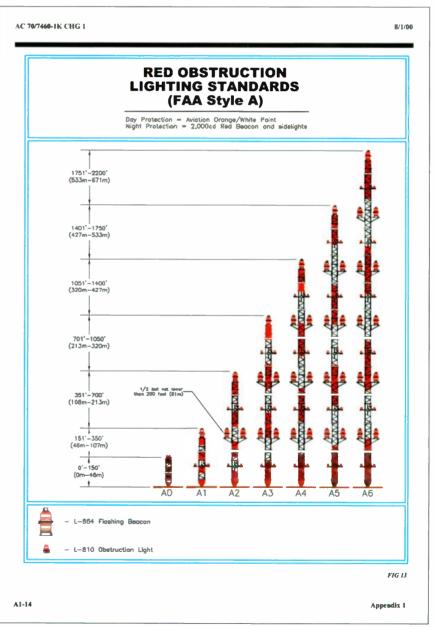
While paint provides daytime protection to towers, it is obviously not effective in the dark. Night protection is most commonly accomplished with red lights, listed in the FAA 70/7460 Advisory Circular as FAA Style A. See graphic at right.

You will notice the tower lighting schemes are numbered A0-A6. This becomes meaningful when you understand that the number refers to the number of flashing beacons for each tower. For example, an A0 tower has no beacons – just one top-mounted obstruction lamp – while an A6 has six beacons.

Additionally, for every beacon there is also a set of obstruction lamps. Thus, an A1 tower has one beacon and one set of obstruction lamps, and an A6, six beacons and six obstruction lamp sets. This designation system applies to all of the FAA lighting standards, A through E For example, the B-5 high intensity system contains five levels of flashing high intensity beacons.

Your tower may well have lighting that does not conform to this circular since the FAA did revise the lighting standards some years ago. If your tower lighting does not agree with the current FAA standards, your station license and ASR should both specify the same non-conforming use. The FCC Form 715 (or 715A) contains the previously issued lighting standards that may be on your license, as well as other requirements detailed following.

If you have multiple beacon levels (A2-A6), all beacons should be wired to flash simultaneously. The flash rate for all beacons is to be maintained within 12 - 40 flashes per minute. Each beacon consists of (2) 620 or 700-watt lamps and both lamps must operate to produce the



From FAA Advisory Circular 70/7460 www.faa.gov/ats/ata/ai/index.html

required luminosity of the fixture.

All red lights are to burn continuously or be controlled by a light sensitive device adjusted to turn the lamps on at a north sky light intensity level of about 35 foot candles and turned off at a north sky light intensity level of about 58 foot candles.

Medium and High Intensity Lighting

Because the proliferation of "light pollution" across the country, an alternative form of structure marking is often specified for towers of substantial height. Usually applied to towers in excess of 500 feet above ground level, either medium or high intensity lights ("strobes") do provide an improved conspicuity to tower structures.

Strobe lights are ordered according to the following standards:

FAA Style B: High Intensity

FAA Style C: High Intensity with Medium Intensity Strobe at top of appurtenance greater than 40 feet.

FAA Style D: Medium Intensity White (towers < 500')

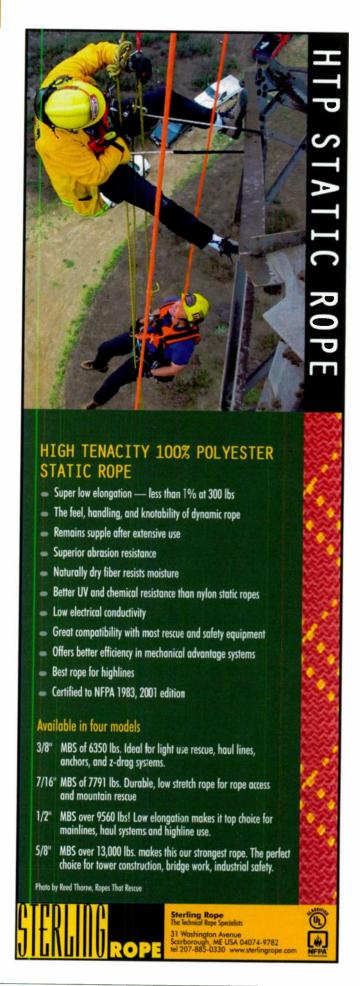
FAA Style E: Medium Intensity Dual (Red/White) (towers < 500')

FAA Style F: Dual High Intensity (strobes day/red lights night)

In most cases, strobe-lit towers operate with strobes 24 hours per day to provide both day and night protection. As a result, painting for the sake of conspicuity is not required. This provides a maintenance costs saving which can help offset the cost of the strobe system. However, the prudent engineer will maintain some sort of surface coating to protect the tower steel even if the aviation orange and white paint is not required.

Monitoring

All lights are to be observed once each 24 hours either manually or by an automatic alarm system. Failure of a top mounted light or any flashing beacon regardless of its position on the tower must be reported to the FAA within 30 minutes of discovery, and again upon restoration of normal operation. Failures of obstruction (non-flashing) lamps are to be recorded in the station log and repaired as soon as practicable, but notification to the FAA is not required.



Proper Tower Marking

Please note that a completely automatic tower lighting alarm system must be able to detect the failure of any single lamp (including one of the two lamps in an incandescent beacon) as well a flasher failure that would cause normally flashing lamps to be stuck "on."

Most new tower lighting packages include such an alarm system, which monitors the condition of the lights, flash rate, and, for strobes, any required light step-downs from twilight to night. Engineers may need to fabricate such a system for older lighting setups, but aftermarket tower light monitoring modules are available which can make this a relatively easy task.

If your station has installed an automatic alarm system, then you are exempt from the daily monitoring requirement so long as the system will immediately notify a responsible party of failures such as those mentioned above. That responsible party is required to investigate the situation and report to the FAA as appropriate. Note that the FAA prefers that the station visually confirm the problem prior to notification.

Maintenance

Recent FAA policies mandate a 15 day window for tower lighting repairs. If you notify the FAA of a problem, you will have 15 days to repair it before the FAA notifies the FCC. You must also immediately notify the FAA again when the problem has been cleared within that 15 days. If you do not respond within the 15 days, the FAA will notify the FCC and you will soon receive a phone call from your nearest Enforcement Bureau asking why the problem was not been "cleared" with the 15-day period.

If you cannot repair a problem within 15 days of reporting it, be sure to call the FAA again and inform them of that fact.

FCC Rule 17.47 mandates quarterly inspections of the tower lighting system. Although many engineers believe this also requires a structural inspection of the tower itself, this required inspection is in fact only concerned with the tower lighting system. Issues such as flash rate, proper photocell operation, investigation of cracked lenses, inspection of wiring and conduits, etc. are typical components of the required quarterly inspection.

During this inspection, you may also wish to take the opportunity to do a general visual inspection of the tower, anchors, and grounding as well. Although 17.47 does not specify how or where these quarterly reports are

to be recorded, most stations maintain a written report with their maintenance records at the transmitter site.

Summary

Part 17 of the FCC rules, along with FCC Form 715 and 715A and the pertinent FAA Advisory Circular AC/70/7460 contain the rules and regulations applicable to tower marking, monitoring, and maintenance. Adherence to these rules is not only a regulatory requirement, but is first and foremost a demonstration of our industry's dedication to maintaining the highest standards of flight safety. In a future installment of this series, we will discuss Public Access Protection at tower sites.

Terry Baun serves as an ABIP inspector for Broadcast Associations in several states, including Wisconsin, Indiana, Ohio, and Michigan. You may contact him at tbaun@criterion-broadcast.com

This article is reprinted with permission from the June 2004 issue of Radio Guide (www.radio-guide.com).





Although detailed membership information is only available to NATE members in good standing, the following websites are provided as a service to Tower Times readers. Links to these websites can be found on the NATE website by visiting the following page: www.natehome.com/Membership/Members/Index.cfm

Any NATE Member Company which has recently developed a new website or has a website address change, should email their website address to Carol Coughlin, NATE Membership Coordinator (carol@natehome.com).

4SE, Inc
A & G Tower Service
A & W Communications, Inc
AF CommSupplywww.afcommsupply.com
Adams Tower Services, Inc
Advanced Tower Services, Inc
Advanced Wireless Solutions, Inc
Aero Solutions
Alan Dick & Co. (USA) Inc
Alliance Communications Cables, Inc
Allied Tower Co., Inc
Altec Industries, Inc
Aluma-Form D/Dixie
AMERICAN TOWER CORPORATION
American Wreless Supply www.awsdallas.com AMERISAFE www.amerisafe.com
AnchorGuard LLC www.anchorguard.com
Andrew Corporation
Antenna Products Corp
Arthur J. Gallagher & Cowww.ajg.com
Asbuilt Construction, Inc
Atlantic Tower Services, Inc
B & B TOWER SERVICE, LLCwww.bbtowers.com
Baker Equipment
Baran Telecomwww.barantelecom.com
Bearcat Builders
BETTER METAL, LLC. www.bettermetal.com
Bird Technologies Groupwww.bird-technologies.com
Birdtex, Inc
Blanton Antenna Service, Inc
Boss Construction Services, LLC
Bridon American Fabricationswww.bridonamerican.com
Brook Hill Communications, Inc
Buckingham Mfg. Co., Inc
C &r W Telecom, LLC
Cache Valley Electric
Capital Tower & Communications, Inc
Carolina Towers, Inc
CCI Telecom Inc
Cellxion Wireless Services, LLC
Central Florida Telefibe Communications Inc
Chance/HPwww.abchance.com
Charles Taylor Communications, Inc
CIT Technology Rentals & Serviceswww.TRSonesource.com
Clearlinx Services, Ltd
CMS Wireless, LLC
Coast to Coast Tower Service, Inc
CommScope, Inc
Communication Equipment Specialists, Incwww.ces-kcmo.com
Communication Services, Inc
ComTrac Tower Services Inc
COMTRAIN LLC
Cornerstone Tower Service, Incwww.cornerstonetower.com
Cornerston: Wireless Construction Services, Incwww.cornerstonewireless.net
CPT Wireless
CSB Communications, LLCwww.csbcomm.com
D.W. Tower, Inc
Daley Tower Service, Inc
DBUSALA Protecta

63

Demand Communications, Inc	
DESIGN Telecommunications	
Destiny Communications Inc	
Dialight Corporation	
Dielectric Communications	
Dietz Brothers, Inc	
Doty-Moore Tower Services, Inc	
Drilling Service Company	
Dynamic Construction, Inc	
E.M. Enterprises General Contractors, Inc	
Eagle Communication Services, Inc.	
Earl Telecom, LLC	
Eastern Communications, Inc	
eciWireless LLCwww.eciWireless.us	
Edd Helms Data Com Group	
Edmiston Tower, Inc	
Electro Mechanical Industries, Inc	
Elite Wirelesswww.elitewirelessinc.com	
Elite Wireless, L.L.C. www.elitewirlessllc.com	
Elk River, Inc. www.elkriver.com	
Emergency Radio Service, Inc. www.ERS2way.com Epic Communications www.mtsi.com	
Equipment Corporation of America	
ERI Installations, Inc	
ERICO. Inc	
ETS-Lindgren	
Eupen Cable USA Inc	
Evergreen Helicopters, Inc	
Excel Tower Services, Inc	
Excell Communications, Inc	
Fibergrate Composite Structures, Inc	
Fibrebond Resources, Inc	
Foresite Services, Inc	
Foundation Systems and Anchors, Inc	
Fred A. Nudd Corporation	
Frontier lower Service, Inc	
Fryer's lowerSource	
FS1 Consulting International, Inc. www.fstconsulting.com General Telecom, Inc. www.gtitech.net	
Glen Martin Engineering, Inc	
Global Signal Services LLC	
Grant Tower, Incwww.granttower.com	
Gravitec Systems, Inc	
Green Mountain Communications, Inc	
Gritz Towers, Inc	
GSSI Scalantswww.gasc.net	
Gulf Equipment Corporation	
Gunther-Nash, Inc	
Harger Lightning & Grounding	
Hayden Tower Service, Inc	
Henry's Tower Service, Inc	
Hightower Communications, Inc	
Horne Brothers Construction, Inc	
Houston Structures, Incwww.ulvencompanies.com	
Howell Communications	
Huber + Suhnerwww.hubersuhnerinc.com	
Hutton Communications, Inc	
Hydradyne Hydraulics	
Hydraulic Power Systems, Inc	
Idaho Tower Company	
IETS	
Industrial Communications & Electronics, Inc	
Installation Services, Inc	
Integrated Tower Systems ("ITS")	
Integrity Tower, Inc	
Intermountain Tower Specialists, Inc	
ITE, LLC	
J.L.B. Construction Inc	

JG Contracting Company	
INC Construction, LP	
KCI Wireless Services, Inc.	
Kent Power, Inc.	
Kenwood Telecom	
Key Communications, Inc.	www.kev.cominc.com
Klein Tools, Inc.	
Kline Towers	
Kullman Industries, Inc.	
L T S Wireless, Ltd.	
Larson Associates USA, Inc.	
Lawrence Behr Associates, Inc. (LBA)	
Legacy Telecommunications, Inc.	
Lemco Tool Corporation	
Lenberg Communications Inc.	
Liberty Construction, L.L.C.	
Lift-It Manufacturing Co., Inc.	
Lightning Experts	www.lightningexperts.com
Light's Tower Construction Co Inc.	
Lindapter North America, Inc.	www.lindapter.com
LOMA Communications Specialists	www.lomacomm.com
Lone Star Tower Co.	www.lonestartower.com
Lookout lowers L.L.C.	
Louisiana Radio Communications, Inc.	www.lrcwireless.com
Lyncole XII Grounding	www.lvncole.com
M.T.S.I.	www.mtsi.com
Manitoba Hydro	
Mauldin-Dorfmeier Construction, Communications Div	
McCord Communication Services, Inc.	www.mccordcommunications.com
Megger	
Message Center Management, Inc.	
Microwave Transmission Systems, Inc.	
MidAmerica Towers, Inc.	
Mid-Atlantic Telecommunications, Inc.	
Middle Jennessee Two Way	
MID-STATE Communications & Electronics, Inc.	
Midwest Antenna Systems Inc.	
Midwest Underground Technology, Inc.	
Midwest Unlimited LLC	www.midwestunhmited.com
MIKAB Corporation	
MillerCo, Inc.	
Modern Concrete Inc.	
Modern Concrete Inc.	NON!
Mohawk Tower, Inc.	
	www.mohawktower.com
Mohawk Jower, Inc. Mor Com, Inc. Motorola, Inc.	
Mohawk Jower, Inc. Mor Com, Inc. Motorola, Inc. MSA Fall Protection	
Mohawk Jower, Inc. Mor Com, Inc. Motorola, Inc. MSA Fall Protection Murphy Construction Company, Inc.	.www.mohawktower.com .www.mor-com.com .www.mot.com .www.msanet.com
Mohawk Tower, Inc. Mor Com, Inc. Motorola, Inc. MSA Fall Protection Murphy Construction Company, Inc. N.E. Colorado Cellular, Inc.	
Mohawk Tower, Inc. Mor Com, Inc. Motorola, Inc. MSA Fall Protection Murphy Construction Company, Inc. N.E. Colorado Cellular, Inc. Narda Safety Test Solutions	
Mohawk Tower, Inc. Mor Com, Inc. Motorola, Inc. MSA Fall Protection Murphy Construction Company, Inc. N.E. Colorado Cellular, Inc. Narda Safety Test Solutions NAT-COM, INC.	
Mohawk Tower, Inc. Mor Com, Inc. Motorola, Inc. MSA Fall Protection Murphy Construction Company, Inc. N.E. Colorado Cellular, Inc. Narda Safety Test Solutions NAT-COM, INC. National Steel Erectors Corporation	.www.mohawktower.com .www.mot.com .www.mot.com .www.msanet.com .NONE .www.necci.com .www.narda-sis.com .www.narda-sis.com
Mohawk Jower, Inc. Mor Com, Inc. Motorola, Inc. MSA Fall Protection Murphy Construction Company, Inc. N.E. Colorado Cellular, Inc. Narda Safety Test Solutions NAT-COM, INC. National Steel Erectors Corporation National Strand Products, Inc.	
Mohawk Tower, Inc. Mor Com, Inc. Motorola, Inc. MSA Fall Protection Murphy Construction Company, Inc. N.E. Colorado Cellular, Inc. Narda Safety Test Solutions NAT-COM, INC. National Steel Erectors Corporation National Strand Products, Inc. National Tower Service, I.L.C.	
Mohawk Jower, Inc. Mor Com, Inc. Motorola, Inc. MSA Fall Protection Murphy Construction Company, Inc. N.E. Colorado Cellular, Inc. Narda Safety Test Solutions NAT-COM, INC. National Steel Erectors Corporation National Strand Products, Inc. National Tower Service, L.L.C. Nationwide Tower Company, Inc.	
Mohawk Tower, Inc. Mor Com, Inc. Motorola, Inc. MSA Fall Protection Murphy Construction Company, Inc. N.E. Colorado Cellular, Inc. Narda Safety Test Solutions NAT-COM, INC. National Steel Erectors Corporation National Strand Products, Inc. National Iower Service, L.L.C. Nationwide Tower Company, Inc. NBC.	.www.mohawktower.com .www.mot.com .www.mot.com .www.msaet.com .NONE .www.nacti.com .www.nat-com.com .www.nsec.com .www.nsec.com .www.nationalstrand.com .www.nationaltower.crvice.com .www.nationwidetower.com
Mohawk Tower, Inc. Mor Com, Inc. Motorola, Inc. MSA Fall Protection Murphy Construction Company, Inc. N.E. Colorado Cellular, Inc. Narda Safety Test Solutions NAT-COM, INC. National Steel Erectors Corporation National Strand Products, Inc. National Tower Service, L.L.C. Nationwide Tower Company, Inc. NBC. NELLO CORPORATION	
Mohawk Tower, Inc. Mor Com, Inc. Motorola, Inc. MSA Fall Protection Murphy Construction Company, Inc. N.E. Colorado Cellular, Inc. Narda Safety Test Solutions NAT-COM, INC. National Steel Erectors Corporation National Strand Products, Inc. National Iower Service, L.L.C. Nationwide Tower Company, Inc. NBC. NELLO CORPORATION Nelson Communications Services, Inc.	
Mohawk Tower, Inc. Mor Com, Inc. Motorola, Inc. MSA Fall Protection Murphy Construction Company, Inc. N.E. Colorado Cellular, Inc. Narda Safety Test Solutions NAT-COM, INC. National Steel Erectors Corporation National Strand Products, Inc. National Iower Service, L.L.C. Nationwide Tower Company, Inc. NBC. NELLO CORPORATION Nelson Communications Services, Inc. Neptuno Media, Inc.	
Mohawk Tower, Inc. Mor Com, Inc. Motorola, Inc. MSA Fall Protection Murphy Construction Company, Inc. N.E. Colorado Cellular, Inc. Narda Safety Test Solutions NAT-COM, INC. National Steel Erectors Corporation National Strand Products, Inc. National Iower Service, L.L.C. Nationwide Tower Company, Inc. NBC. NELLO CORPORATION Nelson Communications Services, Inc. Neptuno Media, Inc. Newell Davis Co., Inc.	
Mohawk Jower, Inc. Mor Com, Inc. Motorola, Inc. MSA Fall Protection Murphy Construction Company, Inc. N.E. Colorado Cellular, Inc. Narda Safety Test Solutions NAT-COM, INC. National Steel Erectors Corporation National Strand Products, Inc. National Iower Service, L.L.C. Nationwide Tower Company, Inc. NBC. NELLO CORPORATION Nelson Communications Services, Inc. Neptuno Media, Inc. Newell Davis Co., Inc. NEWMARK INTERNATIONAL INC.	
Mohawk Tower, Inc. Mor Com, Inc. Motorola, Inc. MSA Fall Protection Murphy Construction Company, Inc. N.E. Colorado Cellular, Inc. Narda Safety Test Solutions NAT-COM, INC. National Steel Erectors Corporation National Sterand Products, Inc. National Iower Service, L.L.C. Nationwide Tower Company, Inc. NBC. NELLO CORPORATION Nelson Communications Services, Inc. Neptuno Media, Inc. Newell Davis Co., Inc. NEWMARK INTERNATIONAL INC. Nex-Tech, Inc Mobile Radio Div.	.www.mohawktower.com .www.mor.com.com .www.mor.com.com .www.naet.com .www.nact.com.com .www.nat-com.com .www.nat-com.com .www.nationalstrand.com .www.nationaltowerservice.com .www.nationalvidetower.com .www.nestowers.com .www.nestowers.com .www.nestowers.com .www.nestowers.com .www.nestowers.com .www.nestowers.com .www.newark.com .www.newmark.com
Mohawk Tower, Inc. Mor Com, Inc. Mor Com, Inc. Motorola, Inc. MSA Fall Protection Murphy Construction Company, Inc. N.E. Colorado Cellular, Inc. Narda Safety Test Solutions NAT-COM, INC. National Steel Erectors Corporation National Strand Products, Inc. National Strand Products, Inc. National Tower Service, L.L.C. Nationwide Tower Company, Inc. NBC. NELLO CORPORATION Nelson Communications Services, Inc. Neptuno Media, Inc. Newell Davis Co., Inc. NEWMARK INTERNATIONAL INC. New-Tech, Inc Mobile Radio Div. Noash Construction, Inc.	
Mohawk Tower, Inc. Mor Com, Inc. Mot Com, Inc. Motorola, Inc. MSA Fall Protection Murphy Construction Company, Inc. N.E. Colorado Cellular, Inc. Narda Safety Test Solutions NAT-COM, INC. National Steal Erectors Corporation National Strand Products, Inc. National Tower Service, L.L.C. Nationwide Tower Company, Inc. NBC. NELLO CORPORATION Nelson Communications Services, Inc. Neguli Davis Co., Inc. NewMARK INTERNATIONAL INC. Nex-Tech, Inc Mobile Radio Div. Noash Construction, Inc. North Central Anterna Technologies, Inc.	
Mohawk Tower, Inc. Mor Com, Inc. Mor Com, Inc. Motorola, Inc. MSA Fall Protection Murphy Construction Company, Inc. N.E. Colorado Cellular, Inc. Narda Safety Test Solutions NAT-COM, INC. National Steal Erectors Corporation National Strand Products, Inc. National Tower Service, L.L.C. Nationwide Tower Company, Inc. NBC. NELLO CORPORATION Nelson Communications Services, Inc. Newell Davis Co., Inc. NEWMARK INTERNATIONAL INC. Nex-Tech, Inc Mobile Radio Div. Noash Construction, Inc. North Central Antenna Technologies, Inc. Northern Pride Communications, Inc	
Mohawk Tower, Inc. Mor Com, Inc. Mor Com, Inc. Motorola, Inc. MSA Fall Protection Murphy Construction Company, Inc. N.E. Colorado Cellular, Inc. Narda Safety Test Solutions NAT-COM, INC. National Steel Erectors Corporation National Strand Products, Inc. National Iower Service, L.L.C. Nationwide Tower Company, Inc. NBC. NELLO CORPORATION Nelson Communications Services, Inc. Neptuno Media, Inc. Newell Davis Co., Inc. NEWMARK INTERNATIONAL INC. Nex-Tech, Inc Mobile Radio Div. Noash Construction, Inc. Northern Pride Communications, Inc. Northern Pride Communications, Inc. Northern Pride Communications, Inc. Northern Pride Communications, Inc. Northand Technology, Inc.	
Mohawk Tower, Inc. Mor Com, Inc. Mor Com, Inc. Motorola, Inc. MSA Fall Protection Murphy Construction Company, Inc. N.E. Colorado Cellular, Inc. Narda Safety Test Solutions NAT-COM, INC. National Steal Erectors Corporation National Strand Products, Inc. National Tower Service, L.L.C. Nationwide Tower Company, Inc. NBC. NELLO CORPORATION Nelson Communications Services, Inc. Newell Davis Co., Inc. NEWMARK INTERNATIONAL INC. Nex-Tech, Inc Mobile Radio Div. Noash Construction, Inc. North Central Antenna Technologies, Inc. Northern Pride Communications, Inc	
Mohawk Tower, Inc. Mor Com, Inc. Mor Com, Inc. Mor Com, Inc. Motorola, Inc. MSA Fall Protection Murphy Construction Company, Inc. N.E. Colorado Cellular, Inc. Narda Safety Test Solutions NAT-COM, INC. National Steel Erectors Corporation National Strand Products, Inc. National Strand Products, Inc. National Tower Service, L.L.C. Nationwide Tower Company, Inc. NBC. NELLO CORPORATION Nelson Communications Services, Inc. Neptuno Media, Inc. Newell Davis Co., Inc. NEWMARK INTERNATIONAL INC. New-Tech, Inc Mobile Radio Div. Noash Construction, Inc. North Central Antenna Technologies, Inc. Northern Pride Communications, Inc. Northern Pride Communications, Inc. Northwest Public Power Association Northwest Tower Northwest Tower	
Mohawk Tower, Inc. Mor Com, Inc. Mor Com, Inc. Motorola, Inc. MSA Fall Protection Murphy Construction Company, Inc. N.E. Colorado Cellular, Inc. Narda Safety Test Solutions NAT-COM, INC. National Steel Erectors Corporation National Strand Products, Inc. National Iower Service, L.L.C. Nationwide Tower Company, Inc. NBC. NELLO CORPORATION Nelson Communications Services, Inc. Neptuno Media, Inc. Newell Davis Co., Inc. NEWMARK INTERNATIONAL INC. Nex-Tech, Inc Mobile Radio Div. Noash Construction, Inc. North Central Antenna Technologies, Inc. Northern Pride Communications, Inc. Northern Pride Communications, Inc. Northwest Tower Northwest Tower Northwest Tower Engineering, PLLC Novatec Braids Ltd.	
Mohawk Tower, Inc. Mor Com, Inc. Mor Com, Inc. Mor Com, Inc. Mor Com, Inc. Mor Com, Inc. Mor Com, Inc. MSA Fall Protection Murphy Construction Company, Inc. N.E. Colorado Cellular, Inc. Narda Safety Test Solutions NAT-COM, INC. National Streat Products, Inc. National Strand Products, Inc. National Tower Service, L.L.C. Nationwide Tower Company, Inc. NBC NELLO CORPORATION Nelson Communications Services, Inc. Neyell Davis Co., Inc. NEWMARK INTERNATIONAL INC. Nex-Tech, Inc Mobile Radio Div. Noash Construction, Inc. North Central Antenna Technologies, Inc. Northern Pride Communications, Inc. Northern Pride Communications, Inc. Northwest Tower Northwest Tower Northwest Tower Engineering, PLLC Novatee Braids Ltd. Ocean Wireless, L.L.C.	
Mohawk Tower, Inc. Mor Com, Inc. Mor Com, Inc. Mor Com, Inc. Mor Com, Inc. Mor Com, Inc. MSA Fall Protection Murphy Construction Company, Inc. N.E. Colorado Cellular, Inc. Narda Safety Test Solutions NAT-COM, INC. National Steal Erectors Corporation National Strand Products, Inc. National Tower Service, L.L.C. Nationwide Tower Company, Inc. NBC NELLO CORPORATION Nelson Communications Services, Inc. Neyell Davis Co., Inc. NEWMARK INTERNATIONAL INC. Nex-Tech, Inc Mobile Radio Div. Noash Construction, Inc. North Central Antenna Technologies, Inc. Northern Pride Communications, Inc. Northwest Tower Northwest Tower Northwest Tower Engineering, PLLC Novatce Braids Ltd. Ocean Wireless, L.L.C. Omni Contracting, Inc.	
Mohawk Tower, Inc. Mor Com, Inc. Mor Com, Inc. Motorola, Inc. MSA Fall Protection Murphy Construction Company, Inc. N.E. Colorado Cellular, Inc. Narda Safety Test Solutions NAT-COM, INC. National Steel Erectors Corporation National Strand Products, Inc. National Iower Service, L.L.C. Nationwide Tower Company, Inc. NBC. NELLO CORPORATION Nelson Communications Services, Inc. Neptuno Media, Inc. Newell Davis Co., Inc. NEWMARK INTERNATIONAL. INC. Nex-Tech, Inc Mobile Radio Div. Noash Construction, Inc. Northern Pride Communications, Inc. Northern Pride Communications, Inc. Northwest Public Power Association Northwest Tower NorthWest Tower Engineering, PLLC Novatec Braids Ltd. Ocean Wireless, Lt.C. Omnit Contracting, Inc. On-Air Resources, Inc.	
Mohawk Tower, Inc. Mor Com, Inc. Mor Com, Inc. Mor Com, Inc. MSA Fall Protection Murphy Construction Company, Inc. N.E. Colorado Cellular, Inc. Narda Safety Test Solutions NAT-COM, INC. National Steel Erectors Corporation National Strand Products, Inc. National Iower Service, I.L.C. Nationwide Tower Company, Inc. NBC NELLO CORPORATION Nelson Communications Services, Inc. Neptuno Media, Inc. Newell Davis Co., Inc. NEWMARK INTERNATIONAL. INC. Nex-Tech, Inc Mobile Radio Div. Noash Construction, Inc. North Central Antenna Technologies, Inc. Northern Pride Communications, Inc. Northhern Pride Communications, Inc. Northwest Public Power Association Northwest Tower Northwest Tower NorthWest Tower Engineering, PLLC Novatec Braids Ltd. Ocean Wireless, L.L.C. Omnit Contracting, Inc. On-Site Wireless Communications	
Mohawk Tower, Inc. Mor Com, Inc. Mor Com, Inc. Mor Com, Inc. MSA Fall Protection Murphy Construction Company, Inc. N.E. Colorado Cellular, Inc. Narda Safety Test Solutions NAT-COM, INC. National Steel Erectors Corporation National Strand Products, Inc. National Iower Service, L.L.C. Nationwide Tower Company, Inc. NBC. NELLO CORPORATION Nelson Communications Services, Inc. Neptuno Media, Inc. Newell Davis Co., Inc. NEWMARK INTERNATIONAL. INC. Nex-Tech, Inc Mobile Radio Div. Noash Construction, Inc. North Central Antenna Technologies, Inc. Northern Pride Communications, Inc. Northhern Pride Communications, Inc. Northwest Public Power Association Northwest Tower NorthWest Tower Engineering, PLLC Novatec Braids Ltd. Ocean Wireless, L.L.C. Onnii Contracting, Inc. On-Site Wireless Communications Optasite, Inc.	
Mohawk Tower, Inc. Mor Com, Inc. MSA Fall Protection Murphy Construction Company, Inc. N.E. Colorado Cellular, Inc. Narda Safety Test Solutions NAT-COM, INC. National Steel Erectors Corporation National Strand Products, Inc. National Strand Products, Inc. National Tower Service, L.L.C. Nationwide Tower Company, Inc. NBC. NELLO CORPORATION Nelson Communications Services, Inc. Neptuno Media, Inc. Newell Davis Co., Inc. NEWMARK INTERNATIONAL INC. Nex-Tech, Inc Mobile Radio Div. Noash Construction, Inc. North Central Antenna Technologies, Inc. Northern Pride Communications, Inc. Northmest Tower Northwest Tower Northwest Tower Northwest Tower Engineering, PLLC Novatec Braids Ltd. Ocean Wireless, L.L.C. Omni Contracting, Inc. On-Air Resources, Inc. OT Lighting	
Mohawk Tower, Inc. Mor Com, Inc. MSA Fall Protection Murphy Construction Company, Inc. N.E. Colorado Cellular, Inc. Narda Safety Test Solutions NAT-COM, INC. National Steel Erectors Corporation National Strand Products, Inc. National Strand Products, Inc. National Tower Service, L.L.C. Nationwide Tower Company, Inc. NBC. NELLO CORPORATION Nelson Communications Services, Inc. Neyptuno Media, Inc. Newell Davis Co., Inc. NEWMARK INTERNATIONAL INC. Nex-Tech, Inc Mobile Radio Div. Noash Construction, Inc. North Central Antenna Technologies, Inc. Northern Pride Communications, Inc. Northern Pride Communications, Inc. Northwest Public Power Association Northwest Tower Northwest Tower Northwest Tower Engineering, PLLC Novatec Braids Ltd. Ocean Wireless, L.L.C. Omni Contracting, Inc. On-Site Wireless Communications Optasite, Inc. OT Lighting P & D Antenna Service, Inc.	
Mohawk Tower, Inc. Mor Com, Inc. MSA Fall Protection Murphy Construction Company, Inc. N.E. Colorado Cellular, Inc. Narda Safety Test Solutions NAT-COM, INC. National Steral Products, Inc. National Strand Products, Inc. National Strand Products, Inc. Nationwide Tower Company, Inc. NBC. NELLO CORPORATION Nelson Communications Services, Inc. Neyell Davis Co., Inc. NEWMARK INTERNATIONAL INC. New-Tech, Inc Mobile Radio Div. Noash Construction, Inc. North Central Antenna Technologies, Inc. Northern Pride Communications, Inc. Northern Pride Communications, Inc. Northwest Tower Northwest Tower Northwest Tower Association Northwest Tower Engineering, PLLC Novatec Braids Ltd. Ocean Wireless, L.L.C. Omni Contracting, Inc. On-Site Wireless Communications Optasite, Inc. OT Lighting P & D Antenna Service, Inc. Paramount Advanced Wireless . www.	
Mohawk Tower, Inc. Mor Com, Inc. MSA Fall Protection Murphy Construction Company, Inc. N.E. Colorado Cellular, Inc. Narda Safety Test Solutions NAT-COM, INC. National Steel Erectors Corporation National Strand Products, Inc. National Strand Products, Inc. National Tower Service, L.L.C. Nationwide Tower Company, Inc. NBC. NELLO CORPORATION Nelson Communications Services, Inc. Neyptuno Media, Inc. Newell Davis Co., Inc. NEWMARK INTERNATIONAL INC. Nex-Tech, Inc Mobile Radio Div. Noash Construction, Inc. North Central Antenna Technologies, Inc. Northern Pride Communications, Inc. Northern Pride Communications, Inc. Northwest Public Power Association Northwest Tower Northwest Tower Northwest Tower Engineering, PLLC Novatec Braids Ltd. Ocean Wireless, L.L.C. Omni Contracting, Inc. On-Site Wireless Communications Optasite, Inc. OT Lighting P & D Antenna Service, Inc.	

PennSummit Tubular, LLC	
Penn-Tech International, Inc Pentower Construction	www.penntechint.com
PERFECT WIRELESS INC	
Phoenix Tower Service 11.C	www.phocnixtower.net
Pioneer Telephone Cooperative, Inc.	
NS Communciations Group, Inc	
Positron Inc.	www.positronpower.com
Precision Communications, Inc.	
Preformed Line Products Presco Telecommunications Inc	
Primus Electronics	www.primuselectronics.com
Professional Resources & Services, Inc.	
PVS. Inc. Juad Construction & Communications Inc.	
QualNet Communications	
Questar InfoComm, Inc	
R & M Electrical Telecom Munt_Inc R & R Communications. Inc	
Radian Communication Services Corporation	
Vadio Frequency Systems	www.rfsworld.com
kadio Tower Company Radiofrequency Safety International (RSI)	
lange Telecommunications	
Lapid Systems, Inc.	
Remote Monitoring Services. Inc	
Rescue Response Gear	
Rex Industries, Inc	
RI Industries	
Rhodes Tower Service, Inc	
Richland Towers, Inc	www.richlandtowers.com
Roco Rescue	
> & S Communication Specialists. Inc.	
Sabre Communications Corporation	www.sabrecom.com
AE Inc	
SBA Network Services. Inc. schwaninger & Associates, PC	www.sbasile.com
seacomm Frectors Inc	
sector Technology Corporation	
shaffer Iower Services, Inc shane Davis & Assoc - Iower Painting	
shen.indoah Tower Service, LTD	www.shenandoahtower.com
simons Construction Incorporated	
Single Source Solution Inc.	C C
Sioux Falls Tower & Communications	www.siouxfallstower.com
site Communications Systems, Inc.	www.mtsi.com
SITE PRO LINC	
site Resources, Inc	www.siteMaster.com
skyhook Inc.	www.skyhook.inc.com
skytee, Inc	
smith Berger Marine Inc.	www.smithberger.com
soll Americas	www.fltelcon.com
southeastern Communication Service, Inc.	www.secs-wireless.com
southern Broadcast Services, Inc. www. southern Marketing Associates, Inc.	
southern Telecom Services	www.southerntelecomservices.com
Specialty Systems, LLC	www.specialtysystemsllc.com
sprint North Supply - Wireless Division	
Stallone Electric. Inc	
stanton Hill Company	www.stantonhillcompany.com
Start Point LLC	
STC Netcom, Inc. Steinfel Communications, Inc.	
Sterling Rope	www.sterlingrope.com
Stewart Flectric & Communication	
Stochr Companies Incorporated	
Strategic Communications Services, Inc.	
SubCarrier Communications, Inc.	
Sulowski Fall Protection Summit Solutions Group, LLC	
SunTech Michigan, L.1.C	www.suntechmichigan.com
SUPERIOR TOWER SERVICE, INC.	, .www.stsinc.micronpeweb.com

Surge Suppression Incorporated	WWW SUPERSUPPRESSION COMP
Swager Communications, Inc	
System One Communications	
LAMS felecom, Inc	
Lalley Communications Corp. IANA Mfg. Co.	
ICB Group, Inc.	
TEAM Communications	
Tech Safety Lines, Inc.	
Telecom Procurement Services, Inc. Tenacend Construction & Development, Inc.	
Tennessee Equipment Supply Inc.	
Tennessee Valley Authority (TVA)	www.tva.gov
TESSCO Technologies	
The Final Connection, Inc	www.thecrospygroup.com
The LOAD & A-2-B Company, Inc.	www.loada2h.com
The Lyle Company	www.lyleco.com
thermOweld 1	www.thermoweld.com
Thomas & Betts - Telecommunications Group Tierra Limited, Inc.	www.tierralimited.com
Timberland Equipment Finited .	www.timberland.on.ca
Times Microwave Systems	www.timesmicrowave.com
TKH Enterprises, Inc	
Tower 16 Inc	
Tower Communications, Inc.	
Tower Inspection, Inc	
Tower Network Services Tower Resource Management, Inc	
Tower Service & Manufacturing Co.	www.towerservice.net
Tower Services, Inc	www.towerscrvicesinc.com
Tower Systems South Inc	
Tower Systems, Inc. Towerline Software 11C	www.towersystems.com
Tractel Inc - Griphoist Division	www.te-inc.com
Tram's lowers, Inc	www.trainstowers.com
Iri State Tower, Inc	www.tristatetower.com
In-County lower Service, Inc	
Trinty Products, Inc.	www.frinityinc.com
Invlor ISF	. www.trylon.com
TUT-TUG Products	www.tuf-tug@aol.com
TWR Lighting, Inc.	www.twrlighting.com
U.S. Information Systems. Inc. UBCT, INC	www.ulsts.net
Ubiqui Tel PCS UNIMAR, INC	www.ubiquitelpcs.com
UNIMAR, INC.	www.unim.u com
UniTech Services Group United Communications Group, Inc.	www.unitech-rl.com
United Contracting, Inc.	www.uniredcontracting.net
United States Tower Services, LTD	www.ustowerservices.com
United Telecom of Central Florida, Inc.	
US Tower Services Inc. Utilines & C.C., Inc.	www.uslowerservicesinc.com
Utility Service Communications Co	www.utilityservice.com
Utility Vault	www.uspleasanton.com
Valcom Wireless Const. Inc	
Valmont Structures	
Vertical Structures, Inc	www.verticalstructures.com
Wagstaff Construction Services, Inc	
WANHO Manufacturing, LLC	
Wehr Constructors, Inc	
Weisman Consultants Inc w	www.cisman-consultants.com
WennSoft	
Western low a Tech Community College Western States Industries	
Western Tel-Com Developments, Inc	
Western Towers	www.westerntowers.com
Wes lower Communications, Inc	
WIRLCO Galvanized Strand Wireless Legacy Corp.	
Wolf Contractors	
World Tower, Inc.	www.worldtower.com
Wren Construction, Inc.	
XBSS Telecomm XI. Microwave Inc.	
Yankee Microwave, Inc	

Drunk Driving is a Dead End

runk driving is no accident. Use alcohol responsibly. Volunteer to be the designated driver. Take the keys from a friend or family member who has had too much to drink. Be a responsible host.

Did You Know?

- The National Highway Traffic Safety
 Administration (NHTSA) estimates alcohol-related fatalities have decreased 29
 percent from 1986 to 1996. Recent figures,
 however, indicate impaired driving is on
 the rise. The battle to reduce drinking and
 driving is far from over.
- In 1996, more than 17,000 people died in alcohol-related crashes, 321,000 were injured, and nearly 1.4 million were arrested for driving under the influence of alcohol or narcotics.

Celebrate Safely

- Celebrations are a part of our lives and sometimes those celebrations include alcohol. They should not, however, involve impaired driving.
- A great party features activity, good food and happy people, some of whom may drink alcohol. But make sure non-alcoholic beverages are available.
- When serving food, choose items high in protein, such as cheeses and pizza, because they help absorb alcohol. Offer a variety and serve it in waves.
- Be the kind of friend or co-worker who will take the keys if someone has had too much to drink. Let a designated driver or cab provide a ride home.
- Decide who is the designated driver before the party starts or before going out for the evening.

Is It Worth It?

- A driving while intoxicated (DWI) or driving under the influence (DUI) conviction can cost as much as \$6,000 in attorney fees, increased insurance rates, towing fines, court costs and bonding fees, and result in a suspended license.
- In many states, a DWI/DUI conviction may remain part of a criminal record for life.
- Nine out of 10 insurance companies automatically cancel a driver convicted on a DWI/DUI violation. Consequently, the driver must find a high-risk insurance company, and rates may increase \$1,000 a year or more.
- An employee will lose at least a half-day from work for court appearances for a first DWI/DUI offense and a whole day for a second offence.
- A person's driver's license can be suspended or revoked for a DWI/DUI conviction, depending upon the law in each state. A conviction in a state other than the residence does not guarantee the home state's licensing agency will not be informed and take action.
- A DWI/DUI conviction on a person's driving record may prevent them from getting a job, a promotion or even result in a job loss.

For more information on impaired driving, contact the Network of Employers for Traffic Safety (NETS) at 202-452-6005.

Source: U.S. Department of Transportation Federal Motor Carrier Safety Administration

On the Web: www.fmcsa.dot.gov



conclusion of this article.

South F

requalification

Prequalification is required in order to bid on Vermont Agency of Transportation work.

Licensing

There is no state law requiring contractors to be licensed; however, electricians and plumbers must be licensed.

Admission of Foreign Corporations

A foreign (non-Vermont) corporation must obtain a Certificate of Authority to transact business in this state A foreign corporation may apply for a certificate by delivering an application and the applicable filing fee to the Secretary of State. Among other things, the application must set forth the name of the foreign corporation, the name of the state or country under whose law it is incorporated, and its date of incorporation and period of duration. The foreign corporation must then deliver a certificate of good standing (or a similar document) duly authenticated by the secretary of state or other official having custody of corporate records in the state or country under whose law it is incorporated, with the completed application. The corporate name must contain the word "corporation," "company," "incorporated," or "limited," or an abbreviation thereof. There is a \$100 filing fee. An annual report must also be filed each year within two and a half months of the end of the fiscal year. The filing fee for the report is \$150. When a corporation has been involuntarily terminated for failure to file its annual report, the secretary of state will collect, for each year the corporation failed to file its annual report, the annual report filing fee and a reinstatement fee of \$25.

Taxes

A corporate income tax is imposed for each calendar year, or fiscal year ending during that calendar year, upon the income earned or received in that taxable year by every taxable corporation. The tax is determined on a graduated scale on taxable net income or carnings allocable to Vermont, from 7% on the first \$10,000, to \$22,615 plus 9.75% on excess over \$250,001. The minimum tax is \$75 for small farm corporations, or \$250 for all other corporations.

A tax is imposed for each calendar year or fiscal year ending during that calendar year, upon the income

How to do Business in Vermont

earned or received in that taxable year by every individual, estate and trust in an amount set forth in statutory tables. The amounts of taxable income set forth in the statutory tables is adjusted annually for inflation by the commissioner of taxes using the Consumer Price Index adjustment percentage, in the manner prescribed for the inflation adjustment of federal income tax.

Employers are required to withhold taxes on the wages of all, resident and nonresident persons receiving compensation for work and services performed in Vermont.

The sales and use tax is 6% on taxable tangible personal property, unless specifically exempt. Tangible personal property that becomes an ingredient or component part of, or is consumed or destroyed or loses its identity in the manufacturing of tangible personal property for sale is exempt. Sales of building materials and supplies to be used in public works or for a tax-exempt organization are exempt from taxation.

A distributor is required to pay a fuel tax of 19¢ per gallon, plus a 1¢ license fee to the commissioner, Diesel fuel is taxed at 25¢ per gallon, plus a 1¢ fee. Sales of motor fuels between distributors are exempt. A refund is available for non-highway use and foreign state highway use. For the purpose of determining the amount of the tax levied and assessed, each distributor is required to send to the commissioner by the twenty-fifth day of each calendar month, a statement or return under oath or affirmation, showing both the number of gallons of motor fuel sold and the number of gallons of motor fuel used by the distributor during the preceding calendar month.

Registration of Business Titles

Partnerships, limited liability companies, corporations, and individuals doing business under names other than their own must register with the Secretary of State. The initial registration fee is \$20, for a period of ten years; the fee is \$10 to file a certificate of cessation, change of business status or an application to reserve a business name; and the fee is \$10 to renew a registration.

Public Works ("Little Miller Act")

The state of Vermont requires any contractor employed by the Agency of Transportation on the construction of a transportation improvement, to secure and file a performance bond in the office of the Secretary of State. The bond must be executed by a surety company authorized to transact business in Vermont, in an amount to be determined by the Agency. The secretary at his or her discretion, may accept other good and sufficient surety in lieu of a bond and, in cases involving contracts for \$100,000.00 or less, may waive the requirement of a performance bond.

In addition, any contractor employed by the Agency of Transportation on the construction of a transportation improvement, must secure and file a payment bond in the office of the Secretary of State. The bond must be executed by a surety company authorized to transact business in this state, in a sum to be determined by the Agency. The secretary at his or her discretion, may accept other good and sufficient surety in lieu of a bond. To obtain the benefit of the bond, the claimant must file a sworn statement of the claim with the secretary of the agency within 90 days after the final acceptance of the project by the state, or within 90 days from the time the taxes or contributions to the state commissioner of employment and training are due and payable. Within one year after filing the claim, the claimant must bring a petition in the superior court, with notice and summons to the principal, surety, and the secretary, to enforce the claim or intervene in a petition already filed.

Any highway contract of more than \$50,000 must be advertised and awarded to the lowest qualified bidder. The only other requirements for public construction projects are to have at least three bids on projects totaling more than \$50,000. Any contract for a state project with a construction cost exceeding \$100,000, funded in part by a capital construction act, must provide that all employees working on the project will be paid at least the mean prevailing wage as published by the Department of Employment and Training.

Mechanics' Liens

When a contract or agreement is made, whether in writing or not, for the erecting, repairing, moving, or altering improvements to real property, or for furnishing labor or material for the above, the person proceeding under the contract or agreement will have a lien on the improvements and the lot of land on which they stand. The same holds true for a person who has a contract with an agent, contractor, or subcontractor for such labor or materials. This lien will not continue in force for more than 120 days from the time when payment came due for the last labor or materials furnished,

unless a notice of the lien is filed in the office of the town clerk. This lien will not take precedence over a deed or other conveyance that had been paid in good faith before record of the lien, nor will it take precedence over a mortgage on the building and property which the owner gave as security, if the mortgage is recorded before the lien is filed. A lien may not be waived in advance and any provision calling for such a waiver will not be enforceable.

A person claiming a lien must file a written memorandum, signed by the person asserting the claim, for the record in the clerk's office of the town where the real estate is situated.

Within three months of filing the memorandum, if payment is due at the time of filing, and within three months from the time payment becomes due if not due at the time of filing, the claimant must commence action for the payment.

Although the person asserting a mechanic's lien should be held to reasonably strict compliance with the requirements of this section, reasonable compliance is all that is required; nicety of form is not essential.

For further information on doing business in Vermont, you may contact:

Office of the Governor
State of Vermont
109 State Street
Montpelier, Vermont 05609

Tel: 802-828-3333 Fax: 802-828-3339

www.state.vt.us/governor/index.htm Tr

To obtain a copy of the General Contractor's Manual "Summary of State Regulations and Laws Affecting General Contractors," contact:

AIA Law Publications American Insurance Association 1130 Connecticut Ave. NW, Suite 100 Washington, D.C. 20036

Tel: 202-828-7100 Fax: 202-293-1219

Did you know? NATE has 2 Member Companies located in Vermont.

Doing Business In...

The following is a list of states which have been featured in our "Doing Business in . . ." article in past Tower Times issues. This list is for your reference.

issues. This list is jor your rejerence.
Alabama
Alaska
Arizona
Arkansas
California
Colorado October 2000
Connecticut
DelawareFebruary 2004
Florida
GeorgiaSeptember 2002
Hawaii
Idaho
Illinois
IndianaJanuary 2003
Iowa
Kansas
Kentucky
Louisiana February 2002
Maine
Maryland
Massachusetts June 2001
Michigan October 2001
Minnesota December 2003
Mississippi
MissouriJuly 2004
· ·
Montana
Nebraska
Nevada
New Hampshire
New Jersey November 2003
New Mexico
New York
North Carolina
North DakotaSeptember 2001
Ohio
OklahomaSeptember 2003
Oregon
Rhode Island
Pennsylvania November 2001
South Carolina
South DakotaOctober 2002
Tennessee
Texas
UtahFebruary 2003
Vermont
Virginia
Washington
West Virginia
Wisconsin
Wyoming
. •

What to Do About "Near Misses"

nlike a western gunfight
"shoot out" at the corral
on television, serious accidents can cause anguish and suffering so real and vivid that persons
involved or nearby bystanders rarely
forget the flow of blood, broken
limbs, crushed bodies, or screams of
pain. An accident without injury
though is more like the bloodless,
painless fakery of television "violence" -- perhaps without real purpose in the drama, and therefore
easy to forget.

In real life there is a danger in brushing off accidents that do not hurt, harm, or damage. When these accidents -- or perhaps we should refer to them as near misses -- happen, we should immediately run the red warning flag up the pole. Because a non-injury accident is like a 104 degree fever, it's a positive sign or symptom that something is wrong.

Sometimes we misdiagnose or completely fail to diagnose the symptoms of near misses, because luck or blind chance saved us from injury. We may tend to shrug it off and forget the near miss with a casual kind of ignorance. Hopefully everyone agrees that it is not a good practice to rely on luck for effective accident prevention.

One of the best ways to eliminate the likelihood of future close calls is through effective root cause analysis and effective corrective action taken on near misses. A list of near misses can be almost endless: lack of proper machine guarding; improper maintenance or grounding of equipment; missing handrails or guardrails; poor housekeeping; improperly stored material; stubbing a toe on a protruding floor object; bumping up against a sharp object; or tripping over clutter and almost falling down. It's best to learn the real lessons from these near misses, since they are very likely to continue to occur repeatedly until an injury occurs.

There was a study done many years ago that found for every serious or disabling injury reported, there were about 10 injuries of a less serious nature, 30 property damage incidents, and about 600 incidents (near misses) with no visible injury or property damage. This study was part of the foundation for the widely accepted accident prevention theory that "increased frequency leads to severity."

How can you help? Report each and every near miss incident to your supervisor immediately in order to help prompt investigation and follow up actions that will reduce the potential for future near misses. Supervisors must partially rely upon you and your fellow workers to report these to them as they just can't see everything.

If you are involved with or witness a near miss incident, remember that you or your co-worker may not get a second injury free chance to hoist that red warning flag up the pole. Do your part to help make the workplace safe for everyone involved.

Report those near misses to your supervisor immediately! Tr

Sources: www.toolboxtopics.com

Give It a Snap

I train construction contractors and general industry workers in many aspects of workplace safety. To drive home the importance of conducting good preuse inspections of body harnesses, lanyards, rigging slings and similar devices, try this: Cut 1-3" wide by 11" long strips of paper. Give one to each student and have them hold the paper by the ends as if they were holding each end of a sling or lanyard. Tell them to snap the ends apart to show how strong the "fabric" is. Now have them put a very small tear (1/4 to 1/2 inch long) in the middle of the "fabric". Now snap the ends apart. The "fabric" will break at the point of the tear.

A similar demonstration can be made for the importance of how a knot in extension cords, lanyards, etc. will weaken the cord or lanyard. Remove a paper or plastic straw cover (like from McDonalds). Have the students hold the ends of the straw cover and snap the ends apart to demonstrate its strength. Now have the students gently tie a knot towards the middle of the wrapper and snap the ends apart. The wrapper will snap at the knot.

I hope you find this as helpful as I did!'

Amy Gibson, Three Rivers Safety Center

Source: Richard Hawk, Inc. www.richardhawkinc.com

Avoid having your ego so close to your position that when your position falls, your ego goes with it.

- GENERAL COLIN POWELL -

NATE Online Marketplace

In an effort to continually increase the benefits available to members, NATE has created an online "Marketplace" as an avenue for members to buy and sell used equipment. Although anyone will be 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, by emailing Corene Iverson at corene@natehome.com, or by faxing the form below to the NATE office at 605-886-5184.
- 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.

Online Marketplace Ad Submittal Form Company Name_ Contact Name Address ___ City ______ State____ Zip____ Fax ___ 40 Words Maximum

All of the above must be filled out completely and faxed to 605-886-5184. Ads may also be placed using the online form on the NATE website at www.natehome.com. You may also email your ad to Corene Iverson at corene@natehome.com. Emailed ads must contain the same information as this form.

Classifieds

Products & Services

Lease **RF** Protection Garments!

Ideal for budgeted projects. (972) 899-3325 solutions@unitech-rf.com



Miscellaneous

ADVERTISE HERE!

- Business Opportunity
 - Tower Space
- Equipment Distributors
 - Equipment Repair
- Equipment Accessories
 - Equipment Wanted
 - · Equipment for Sale
 - Products & Services
 - Publications

For more information, contact Deb Moldenhauer

at 605-886-5450 or E-mail:

deb@natehome.com

NATE PHOTO CONTEST

For more information, see page 20 or contact Deb Moldenhauer

at 605-886-5450

or E-mail:

deb@natehome.com



Membership Categories

The National Association of Tower Erectors was founded by a group of companies whose primary function was erecting, servicing, constructing or maintaining communication towers or similar structures. Two categories of membership have been established: Primary Membership and Support Membership. Please review the descriptions listed below to determine which category best defines your company.

How to Become a **NATE Member**

- Review the membership categories to the right to determine which category best defines your company. If you have questions about the categorization of your company, please contact Carol Coughlin at the NATE office at Tel: 605-882-5865 or 888-882-5865 or Email: carol@natehome.com
- 2. You have two application options:
 - A. You may apply online at www.natehome.com; or
 - B. Completely fill out the membership application WITHOUT PAYMENT via mail or fax to the NATE office:

National Association of Tower Erectors 8 Second Street SE Watertown, SD 57201-3624

Fax: 605-886-5184

- The NATE Membership Coordinator will review the information on the application with the main contact person to verify the company is in the correct category, and determine who will receive complimentary Tower Times subscriptions.
- Once the information is verified, an invoice for membership dues will be sent.
- Once the dues are paid (either by check or 5. credit card) the company will be considered a NATE member and will have access to all NATE benefits and services.
- Within 2 weeks, new members will receive their certificate of membership and in approximately 4 weeks, their membership plaque will be delivered.

PRIMARY MEMBERSHIP

Primary members are classified as any firm or corporation engaged in erecting, servicing, constructing or maintaining communication towers or similar structures as their primary business. Primary membership is divided into two subcategories:

Primary Voting Members are those companies whose primary source of revenue is derived from erecting, servicing, constructing or maintaining communication towers or similar structures. Each primary voting member company shall have one vote in the association.

Primary Non-Voting Members are those primary members who are a division, affiliate or subsidiary of a parent company whose primary source of revenue is other than erecting, servicing, constructing or maintaining communication towers or similar structures.

> Dues are based on the total number of employees, including both office and field personnel.

SUPPORT MEMBERSHIP

Support members are classified as any firm or corporation who does not qualify as a Primary member Support membership is divided into four subcategories:

Manufacturer Members are members whose primary source of revenue is generated from the manufacture of products related to the tower industry.

Construction Members are members who are general contractors or construction management firms whose primary affiliation with the tower industry is conducted through subcontractors.

Associate Members are members whose primary source of revenue is derived from consulting, engineering, reselling, legal counseling, training and other tower industry related fields.

Dues are based on total gross annual revenue.

Affiliate Members are members who are tower owners or FCC license holders.

Dues are based on the total number of sites.

Membership Application

Application must be filled out <u>completely</u> to be considered for membership (2 Pages).

Company Name									
Primary Contact Name									
Secondary Contact Name									
Alternate Contact Name									
Trade Show Contact Name (IF APPLICABLE)									
Advertising Contact Name (IF APPLICABLE)									
Mailing Address									
City	State	Zip							
Shipping Address									
City	State	Zip							
Country									
Telephone #									
Fax #									
Mobile Telephone #									
Website									
E-mail									
Primary Source of Revenue									
Is your company a subsidiary of; affiliated with; or a division of another company? YES NO If yes, what is the parent company's name?									
What is the parent company's primary source of revenue?									

Office Use Only												
Date Revie		Da	te Approved: _ ate Invoiced: _									
Date Paid:			ID Code:									
☐ M		□ W1	□ W2	□L&S								

PRIMARY MEMBERSHIP

Type of Company (Check all that apply):

☐ Tower Erector ☐ Tower Service ☐ Tower Maintenance

Number of Employees/Annual Dues (Please check

Voting Member

	1	-	5.							\$1,000
	6	-	15 .							\$1,500
	16	-	30 .							\$2,500
	31	-	75 .							\$4,000
	76	-	150							\$4,500
	151	_	225							\$5,000
u	226	_	300							\$5,500
	301	-	375							\$6,000
	376	-	450							\$6,500
	451	_	525							\$7,000
ā										, ,
					. 1					

^{*} Primary Voting dues will continue to increase in increments of \$500 for each 75 employees above 525.

Non-Voting Member

1	-	30								\$1,500
31	-	75 .	٠.							\$2,000
76	-	150								\$2,250
151	-	225								\$2,500
226	-	300								\$2,750
301	-	375								\$3,000
376	-	450								\$3,250
		525								\$3,500
			_;	(c >	K					

^{**} Primary Non-Voting dues will continue to increase in increments of \$250 for each 75 employees above 525.

SUPPORT MEMBERSHIP

(Check which apply to your company):

Manufacturer Member

- Gross annual revenue greater than or equal to \$10 million = \$2,500 annual dues
- Gross annual revenue less than \$10 million = \$1,250 annual dues

Construction Member

- Gross annual revenue greater than or equal to \$10 million = \$2,500 annual dues
- Gross annual revenue less than \$10 million = \$1,250 annual dues

Affiliate Member

- ☐ Tower owners or FCC license holders 25 or more sites = \$2,500 annual dues
- ☐ Tower owners or FCC license holders 24 or less sites = \$1,250 annual dues

Associate Member

- Gross annual revenue greater than or equal to \$10 million = \$2,500 annual dues
- Gross annual revenue less than \$10 million = \$1,250 annual dues

DO NOT SEND PAYMENT WITH APPLICATION!

You will be invoiced upon membership approval.

Membership Application (cont'd)

purch	hase NATE Safety & Educational Materials half of the company:	Agreement Concerning Confidential Information
	ed Person #1	
	ed Person #2	Must be completed and signed by all companies
		applying for or renewing membership.
	ed Person #3	We, the undersigned, realize that the National Association of
Authoriz	ed Person #4	Tower Erectors (NATE) desires to keep various information about its interests and activities confidential and for NATE
produ	ompany provides the following acts and/or services: heck all that apply to your company)	member companies only, including information pertaining to NATE financial activities, the NATE Accident Prevention, Safety and Health Program Guide, educational videotapes and other safety awareness materials and media.
Cab Cor Cor Eng Fall For Gro Gro Hel Hor Insp RF RF RF Rig Safe She	chor Products & Systems ble/Wire Products & Systems ble/Wire Products & Systems ble/Wire Products ble Products ble Products ble Protection & Safety Climb Products ble Protection & Safety Climb Products ble Indation Installation ble Pole — Manufacture/Sales ble Indation Installation ble Pole — Manufacture/Sales ble Indation Installation ble Pole — Manufacture/Sales ble Indation Installation ble Indation bl	We, the undersigned, understand that, as a benefit of NATE membership, we may be furnished with drawings, data sheets, specific safety programs, videotapes, processes, specifications and financial information, and that we may acquire other such information concerning NATE programs and activities from conversations with NATE officers or personnel, or from our own observations of NATE's activities. Information disclosed in documentary forms that NATE considers confidential will be marked "confidential" by NATE. In the case of non-documentary disclosures, NATE will have the obligation to confirm in writing the fact and general motive of each disclosure within a reasonable time after the disclosure occurs. We, the undersigned, understand that a breach of confidentiality could cause harm to NATE, its officers, member companies, and/or personnel and we agree to use every reasonable effort to maintain confidentiality. It is understood that in the course of fulfilling our business commitments, we may have to communicate some of this information with officers, shareholders and/or employees in our company. In the event such information is communicated we will inform them of their responsibility of keeping such information confidential and we will make every reasonable effort to ensure that it is kept confidential.
☐ Tur	ing Services n-Key Construction cribe Other Services Offered:	Information that is obtained by a third party source not under obligation to NATE, or information that is considered is public domain is not confidential. Drawings, data sheets, specific safety programs, videotapes, written processes, written specifications and financial information remain the property of NATE and must be returned if so requested by NATE.
How 4	did you learn about NATE?	Project Area: NATE Safety and Educational Materials and NATE Financial Information
	ertisement Which Source?	
	ustry Contacts	Agreed on behalf of
	de Show Which Show?	Company Name:
	rnet	Company Name.
☐ OSI		Authorized Representative:
	ling Contract	•
Oth	-	Authorized Signature:

NOTE: MEMBERSHIP DUES ARE NON-REFUNDABLE



National Association of Tower Erectors

8 Second Street SE • Watertown, South Dakota 57201-3624 Tel: 605-882-5865 or 888-882-5865 • Fax: 605-886-5184 www.natehome.com • Email: carol@natehome.com

Membership Dues Schedule

NATE membership dues are based on a July 1 - June 30 fiscal year. Refer to the chart below for your first year's prorated dues. Membership dues received after the 20th of the month will be treated as the following month for amortizing purposes. **NATE membership dues are non-refundable**.

For example: A new Primary Voting Member with 4 employees (\$1,000 annual dues) joining October 10 would pay \$750 for the period of October through the end of June. The same new member joining October 25 would pay \$666.67 for the period of November through the end of June.

NOTE: Companies joining NATE during the last quarter of the fiscal year (April, May or June) are required to pay dues for the following fiscal year in addition to pro-rated dues for the current year.

NOTE: MEMBERSHIP DUES ARE NON-REFUNDABLE

		Month Joining													
	TOTA	hud Dues	NI	500	60	40	DIE	/ INT	ALL S	ALM.	MA	MAN	100		
	\$1,000.00	\$1,000.00	\$916.67	\$833.33	\$750.00	\$666.67	\$583.33	\$500.00	\$416.67	\$333.33	\$250.00	\$166.67	\$83.33		
	\$1,500.00	\$1,500.00	\$1,375.00	\$1,250.00	\$1,125.00	\$1,000.00	\$875.00	\$750.00	\$625.00	\$500.00	\$375.00	\$250.00	\$125.00		
	\$2,000.00	\$2,000.00	\$1,833.33	\$1,666.67	\$1,500.00	\$1,333.33	\$1,166.67	\$1,000.00	\$833.33	\$666.67	\$500.00	\$333.33	\$166.67		
	\$2,250.00	\$2,250.00	\$2,062.50	\$1,875.00	\$1,687.50	\$1,500.00	\$1,312.50	\$1,125.00	\$937.50	\$750.00	\$562.50	\$375.00	\$187.50		
	\$2,500.00	\$2,500.00	\$2,291.67	\$2,083.33	\$1,875.00	\$1,666.67	\$1,458.33	\$1,250.00	\$1,041.67	\$833.33	\$625.00	\$416.67	\$208.33		
	\$2,750.00	\$2,750.00	\$2,520.83	\$2,291.67	\$2,062.50	\$1,833.33	\$1,604.17	\$1,375.00	\$1,145.83	\$916.67	\$687.50	\$458.33	\$229.17		
PRIMARY MEMBERSHIP	\$3,000.00	\$3,000.00	\$2,750.00	\$2,500.00	\$2,250.00	\$2,000.00	\$1,750.00	\$1,500.00	\$1,250.00	\$1,000.00	\$750.00	\$500.00	\$250.00		
PRIMARY EMBERSH	\$3,250.00	\$3,250.00	\$2,979.17	\$2,708.33	\$2,437.49	\$2,166.67	\$1,895.83	\$1,625.00	\$1,354.17	\$1,083.33	\$812.50	\$541.67	\$270.83		
PRI	\$3,500.00	\$3,500.00	\$3,208.33	\$2,916.67	\$2,625.00	\$2,333.33	\$2,041.67	\$1,750.00	\$1,458.33	\$1,166.67	\$875 00	\$583.33	\$291.67		
	\$4,000.00	\$4,000.00	\$3,666.67	\$3,333.33	\$3,000.00	\$2,666.67	\$2,333.33	\$2,000.00	\$1,666.67	\$1,333.33	\$1,000.00	\$666.67	\$333.33		
	\$4,500.00	\$4,500.00	\$4,125.00	\$3,750.00	\$3,375.00	\$3,000.00	\$2,625.00	\$2,250.00	\$1,875.00	\$1,500.00	\$1,125.00	\$750.00	\$375.00		
	\$5,000.00	\$5,000.00	\$4,583.33	\$4,166.67	\$3,750.00	\$3,333.33	\$2,916.67	\$2,500.00	\$2,083.33	\$1,666.67	\$1,250.00	\$833.33	\$416.67		
	\$5,500.00	\$5,500.00	\$5,041.67	\$4,583.33	\$4,125.00	\$3,666.67	\$3,208.33	\$2,750.00	\$2,291.67	\$1,833.33	\$1,375.00	\$916.67	\$458.33		
	\$6,000.00	\$6,000.00	\$5,500.00	\$5,000.00	\$4,500.00	\$4,000.00	\$3,500.00	\$3,000.00	\$2,500.00	\$2,000.00	\$1,500.00	\$1,000.00	\$500.00		
	\$6,500.00	\$6,500.00	\$5,958.33	\$5,416.67	\$4,875.00	\$4,333.33	\$3,791.67	\$3,250.00	\$2,708.33	\$2,166.67	\$1,625.00	\$1,083.33	\$541.67		
	\$7,000.00	\$7,000.00	\$6,416.67	\$5,833.33	\$5,250.00	\$4,666.67	\$4,083.33	\$3,500.00	\$2,916.67	\$2,333.33	\$1,750.00	\$1,166.67	\$583.33		
SUPPORT	\$1,250.00	\$1,250.00	\$1,145.83	\$1,041.67	\$937.50	\$833.33	\$729.17	\$625.00	\$520.83	\$416.67	\$312.50	\$208.33	\$104.17		
SUPE	\$2,500.00	\$2,500.00	\$2,291.67	\$2,083.33	\$1,875.00	\$1,666.67	\$1,458.33	\$1,250.00	\$1,041.67	\$833.33	\$625.00	\$416.67	\$208.33		

If you have any questions regarding your first year's prorated dues, please contact Carol Coughlin at the NATE office.

Tel: 605-882-5865 or 888-882-5865

Email: carol@natehome.com

Subsequent dues will be the total amount and will be invoiced in June and due by July 1. *U.S. Funds Only



ADVERTISER	TEL	FAX	WEBSITE	PAGE
ALT	800-950-7933	940-455-2817	www.altfabrication.com	37
AMERISAFE	800-897-9719	800-450-1091	www.ainerisafe.com	51
AnchorGuard	605-331-6972	605-332-7833	www.anchorguard.com	44
Arthur J. Gallagher & Co.	800-637-1016	512-306-8808	www.ajg.com	23
ComTrain LLC	608-329-4840	608-329-4851	www.comtrainusa.com	21
Connect-It Wireless Components	866-781-1300	561-743-9618	www.connectitwireless.net	58
Dakota Riggers & Tool Supply, Inc.	800-888-1612	605-335-8033	www.clakotariggers.com	16
Electronics Research, Inc.	812-925-6000	812-925-4030	www.ERlinc.com	33
Euclid Garment Manufacturing	330-673-7413	330-673-0228	www.euclidgarment.com	19
Harger Lightning and Grounding	800-842-7437	847-548-8755	www.harger.com	50
Hemphill Corp.	918-834-2200	918-836-7109	www.hemphillcorp.com	15
Holaday EMF/ETS-Lindgren	512-531-6400	512-531-6500	www.ets-lindgren.com	12
Hutton Communications	877-648-8866	877-762-8274	www.huttononline.com	11/BC
Hydraulic Power Systems, Inc.	816-221-4774	816-221-4591	www.hpsi-worldwide.com	59
Primus Electronics Corporation	800-435-1636	800-767-7605	www.primuselectronics.com	IBC
Sabre Site Solutions	866-428-6937	712-293-1964	www.sabrecom.com	3
SST Custom Fabricators, Inc.	888-778-2758	863-763-6690	www.towerbrackets.com	42
Sterling Rope Company, Inc.	207-885-0330	207-885-0033	www.sterlingrope.com	61
TESSCO Technologies, Inc.	410-229-1000	410-229-0005	www.tessco.com	IFC
Trylon TSF	519-669-5421	519-669-8912	www.trylon.com	47
TUF-TUG Products	937-299-1213	937-299-0120	www.tuftug.com	40
TWR Lighting, Inc.	713-973-6905	713-973-9352	www.twrlighting.com	17
UniTech Services Group	972-899-3325	972-899-3313	www.unitech-rf.com	43

The above information is compiled as a service to *Tower Times* readers and advertisers. NATE is not liable for errors or omissions, although every effort is made to ensure its accuracy.





Virtually Foolproof. Positively Unbeatable.

Andrew HELIAX® AVA Cable and Positive Stop™ Connectors

Now there's a combination that simply can't be beat. Get industry-leading "Virtual Air™" cable performance, then lock it in with revolutionary no torque/no special tools Positive Stop™ Connectors.

- Lower CapEx, OpEx
- Industry-leading Andrew performance
- Faster deployment, improved QoS

Available in 7/8" and 1-5/8" sizes.

To learn more, go to www.andrew.com or contact your Primus representative:



1-800-892-1413 Illinois • 1-800-345-1636 United States • www.primuselectronics.com

Intermodulation Frustration?

Let Hutton deliver bundled solutions from Sinclair, Valmont, Polyphaser, Commscope and Dekolink for unmatched communications clarity.



World Radio History

www.huttononline.com