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“You’re in good hands at AWRF!” Stealing the old Allstate Insurance motto can apply to the state of your association’s health. Your elected Board of Directors has been working on all cylinders at the summer Long Range Planning meeting that was held in Newport, RI this summer. Here is your update:

- The board has agreed to bring in professional motivational speakers to kick off the General Meetings. In LA our first speaker for you, the members, is on “Teamwork and Embracing Change”.
- For the US members with the uncertainty in the Obama Health Care program we have landed the first members into our captive insurance pool. There will be more following these “first ones in” - stay tuned.
- Our Scholarship committee has proposed changes in the scoring rubric that will be posted on the web site. Scholarship winners are posted on the web site. We are currently giving away $21,000.00 every year.
- The Quality committee will present feedback from our upcoming member survey. The goal is to increase the quality level in all of our shops and to get input on how AWRF is performing.
- We have money in the bank due to the record attendance in Fort Worth for the Product Information Exhibition. Thank you to the almost 700 attendees for making the trek.
- Where are we going next? The site selection committee has identified
  - Baltimore, MD in the spring of 2014
  - St. Louis, MO for the fall of 2014 – Product Information Exhibit
  - Indian Wells, CA near Palm Springs in the spring of 2015
  - New York City, NY for the fall of 2015, we will be within walking distance of Roebling’s Brooklyn Bridge
  - New Orleans, LA for the spring of 2016 – Product Information Exhibit.
- JAGwire management received a new three year contract to continue to lead your organization. Jeff and Barb Gilbert along with Caren VanZant will continue to keep us all on task.
- We are fortunate to have several past Presidents continue to attend and participate at our board meetings. Thank you to Anne Renfroe, Mike Wallace, Gary O’Rourke and Michael Rothermund, Past Presidents who regularly attend, for your continued guidance. I understand the Past President title is the best job on the board!
- Your new officers for 2014:
  - Scott St. Germain of I & I Sling, President
  - Mary Brett of National Industrial Supply, Vice President
  - Bill Franz of Mazzella Lifting Technologies, Treasurer
  - Doug Stitt of The Caldwell Group, Inc., Secretary

As I said, you are in good hands at AWRF. I look forward to seeing you in Los Angeles next month.

**AWRF President Says...**

**AWRF CALENDAR**

<table>
<thead>
<tr>
<th>Year</th>
<th>Date</th>
<th>Event</th>
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<tr>
<td>2013</td>
<td>October 15-17</td>
<td>WSTDA Fall Meeting</td>
<td>Sax Chicago - A Thompson Hotel Chicago, IL</td>
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<td></td>
<td>October 20-23</td>
<td>AWRF General Meeting</td>
<td>Century Plaza Hyatt Regency Los Angeles, California</td>
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<td>2014</td>
<td>January 22-25</td>
<td>AWRF Tech and Board Meetings</td>
<td>Scottsdale, AZ</td>
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<td></td>
<td>April 27-30</td>
<td>AWRF General Meeting</td>
<td>Marriott Waterfront Baltimore, MD</td>
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<td>July 18-19</td>
<td>AWRF Board Meeting</td>
<td>Hyatt Regency St. Louis at the Arch, St. Louis, MO</td>
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<td></td>
<td>October 26-29</td>
<td>AWRF General Meeting &amp; P.I.E.</td>
<td>Hyatt Regency New Orleans, LA</td>
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<td>2015</td>
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<td>AWRF General Meeting</td>
<td>Hyatt Regency Indian Wells, CA</td>
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<td>October 18-21</td>
<td>AWRF General Meeting</td>
<td>Marriott at the Brooklyn Bridge, NY</td>
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<td>2016</td>
<td>April 17-20</td>
<td>AWRF General Meeting and P.I.E.</td>
<td>Hyatt Regency New Orleans, LA</td>
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**Barbara Gilbert**
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Wire and Synthetic Rope in the Entertainment Industry

by Peter Hildebrandt

Wire rope and rigging is thought to be the mainstay of the construction and Marine industries. But these forms of lifting materials are actually used in many different industries especially the entertainment industry.

Entertainment can be just about anything these days. Tear yourself away from your phone, laptop, texting or eBook and you might just end up at a theme park, movie, live theater or other live event such as a concert – or even watching something as old school as a TV show.

Synthetic, wire rope, and natural ropes and rigging have been used in the entertainment industry for decades if not hundreds of years. In Elizabethan times tight rope walkers or rope dancers provided cheap entertainment for the crowds. In more recent centuries, rigging was used in erecting the large circus tents for seeing shows including live aerial acts modern tight rope walking and all else under the big top. Those tents could not have gone up without rigging pulleys and ropes.

Today’s wire rope and rigging is used in entertainment to erect large concert sets to hang speakers video walls it’s just not a concert it is a show. Next time you go to a concert take a moment and look up at all the rigging used to support all the lighting fixtures truss speakers and sometimes even automated flight gear to pick up and fly the performer over the audience’s head.

Jack Rubin and Sons opened up operations in Burbank to serve the entertainment industry, including theatrical endeavors, TV, theme parks, movies and the concert industry. The company has been around since around 1945 and has opened up many branches to be able to serve their customers in any location, be where they are at any time.

“My grandfather, Jack Rubin, early on also sold the wire rope used in the 1970s remake of King Kong,” explains Mike Rubin, co-owner of Jack Rubin and Sons. “I know there were some wire ropes used to move the giant snake in the film. There is a scene in which King Kong rips open the snake’s head; wire ropes were sold to that company to help with the special effects in that scene.”

Rubin is now very diversified in their products and has a lot to offer no matter what the stunt or scene, as Rubin points out. Mike Rubin’s father Bruce is actively involved in the firm as well. “We are also currently involved, for example, with a lot of cargo control for the entertainment industry as they often must move materials around. Our company makes sure that the customer is getting the products to handle transport safely and efficiently.”

There are many different departments in the TV industry to make a show, according to Rubin. Such equipment as construction rigging grips,
electrical grips, special effects set dressing and many other different departments all at one time or another will use rigging.

“I never thought while watching a TV show that there was also was rigging all over the place which you just can’t see,” adds Rubin. “The elevator doors are opened by pulleys and wire rope. Also, light aircraft cable with turnbuckles goes up to the grid system that is supported by chain.

“When a character is looking out the window and seeing mountains - all this is being done on a stage where rigging plays a crucial part. Rigging holds all of the drapery, the walls as well as the grid system to support all the lights in the electrical instrumentation. Highly talented and committed professionals work behind the scenes to craft the magic. Rigging quite literally brings it all together in the entertainment industry.”

The same goes for a feature film or what you see on the big screen. Today’s movies are like mini-job sites; sometimes there are even tower cranes such as in the filming of Titanic.

“The movie industry works on a massive scale,” says Rubin. “They use some of the same material that is used in the construction industry and sometimes it is big rigging. The largest rigging out there would also be used in the special effects industry. Special effects today are not just done on a green screen sometimes they must actually make things fly and flip over with the use of large diameter rope.

“These ropes are as strong as a wire rope of the same diameter. Some of these ropes are the same ones used on large cranes. Filmmaking production teams are very particular in materials they use and only use the best lifting materials. It’s not rare for special effects to use thousands of feet of 1” 12 strand Dyneema, the same fiber used in the marine industry for towing ships.

“They use all types of pulley systems (turnbuckles, shackles, wire rope shows) to create the effect they’re looking for. A movie with an 18 wheeler flying through the air has an 18 wheeler flying through the air. Some of these things are really happening and they’re done by special effects; rigging plays a crucial part.”

In the stunt industry the same thing happens when a stellar cast is assembled for a film, a very talented group of people responsible for capturing the vision of the director comes together. Stunts are just not taking a punch or being hit by car, flying onto a busy highway or even jumping out of the building. Stunt men and women are still used today of course but there also stunt riggers working with wire rope and rigging, whether on a movie set or behind the scenes at a rock concert.

“Today’s stunts have a lot of rigging involved,” explains Rubin. “They use high-speed winches and air Rams to fly not just one person but multiple people in the air. Think films such as Spiderman, Matrix or even Spy Kids movies. The flying going on is really happening on a stage while filming happens.

Stunt man effects use a rope called T 12 a quarter inch diameter. This rope has a very high melting point and is very strong - just as strong as cable. This same diameter withstands loads involving up to 100 pulleys handling one shot to flying people on the stage during filming.

“High-tech C&C pulleys, Harkin pulleys in addition to snatch blocks are used during production. Along with carabiners, swivels, turnbuckles, cables and span sets, rigging plays a crucial role in this business. In the stunt industry the riggers doing the work have to be very knowledgeable about their products because they are hanging stunt people off buildings as well as, sometimes, the actual actor cast in the movie.”

Jack Rubin and Sons had dabbled in wire rope in the film and entertainment industry over the decades since the company’s start. But it really wasn’t until the early 1990s when they really got into major work with the film industry with the filming of the blockbuster Titanic which was released in 1997.

The film version of the ship in Titanic was the size of a football field. The movie was filmed off the coast of Mexico where Rubin went down and visited the set which contain a pair of tower cranes. Some of the movies shot nowadays are actually very large job sites, according to Rubin.
They helped out by supplying large inch and an eighth diameter wire rope to move the Titanic ship in the film. That gave them the idea that there was a large amount of rigging to be used in the film industry, concert industry or any similar spectacles that people end up attending in large numbers. There are also X-Games and carnivals as well as all sorts of shows where there are stages involved with lights and speakers.

There are a lot of synthetics used in the entertainment industry, mostly for special effects and in the stunts department, especially to fly people across the films as well as on stage, according to Rubin. The rope used for this is T-12, a black, quarter-inch diameter rope with a very high breaking strength. This rope is also used because it has a very high melting point. The T-12 rope is used on high speed winches among other uses.

“The people doing this work with rope in the entertainment industry are very particular when it comes to the items that they use and very knowledgeable,” adds Rubin. “They use a full range of rigging items in their work. In addition to flying people around with the use of synthetics, many of the wire ropes in the entertainment industry are used to suspend all of the vast supply of lighting fixtures, draperies, tracked devices and all the other overhead illumination that may not be directly seen in the movie.”

Cable is used as well as turnbuckles to hold up walls and any blocks called for on movie sets. For special effects on quite a few recent movies, large diameter wire rope is also used.

When you see a movie featuring cars flying or certain buses flipping over, all of that is done by hydraulically using wire rope or synthetic 12-strand rope with very high tensile strength, according to Rubin. This is the same material as is used in the marine industry for towing ships, large diameter Dyneema rope which is called Endura 12 and it is ordered in all different sizes to flip things over as well as for its uses for in flying cameras. In such cases as that, it is called a high line for suspending cameras off ropes up to one thousand feet in length.

“This is how special effects in action movies are done,” adds Rubin. “Camera rigs and stunt rigs are done from off cranes; trucks will bring in equipment such as shackles for handling the cameras, safety rigging and other apparatus. This includes a lot of the same items that are used in the construction industry. Wire rope slings, shackles, round slings and many other pieces of equipment are also used in the entertainment industry to get the shot or the action for the movie being filmed on very elaborate sets. There is also a lot of large rigging and cranes used.”

Rubin points out that even with all the enhanced technology and advances with computer graphics, not everything can be done with green screen. Sometimes with a close up shot, the best picture is actually really doing the physical shot. The jump off a building is all tied in with rigging, a lot of redundancy and multiple safety factors are built into the setup, especially in the entertainment industry.

In the past, for a scene involving a car race, or chase, the cameras might be mounted inside the car. Now the car will be cut in half and with today’s technology what they are able to do is a trick of the eye to a large extent.

“We’ve worked on The Life of Pi, we have worked on Titanic as already mentioned, Spiderman, Superman and a number of other action films,” says Rubin. “All of these movies have exciting scenes such as cars driving off bridges and other dramatic events; all of those action scenes come down to the rigging, chain loaders or other lifting components and devices and it is all done for the special effects that are demanded by the filmmakers.

“What the public may not realize or understand is that there is actually a lot of trial and error before the scene goes on camera. There is a lot of practice to get things right before the company comes in that day. The old school quality checking still has to be done. In addition to all the equipment that they have on stage, there is a lot of gear hanging overhead to keep the lights up and it’s all quite heavy, all suspended by wire rope slings, turnbuckles and other equipment.”

Rubin’s equipment has been used on movies sets in Louisiana, Europe, Australia, Canada – wherever a movie crew has to go, they’ve supplied them in those locations. The TV show Fear Factor also uses a lot of rigging that Rubin has supplied. Such equipment consists of cable, high end pulleys and a lot of mountain climbing gear as well as fall protection materials. They manufacture the items for the industry selling them the raw package like a shackle or a hook.
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Taking It To The Street

The economy still seems to be taking the proverbial two steps forward and one step backward on a daily basis. In such an environment, important opportunities to purchase merchandise opportunistically are widespread.

Such opportunities should result in a strong improvement in profitability for distributors. However, in too many cases enhanced buying leads to stagnant or even declining profit. The problem is that distributors simply can’t seem to overcome the urge to take lower supplier prices directly “to the street.” That is, they reflexively pass through lower prices to their customers.

This report examines the nature of the take it to the street issue. It will do so from two important perspectives:

- **Price Reduction Rationales**—A discussion of the two different thought processes that cause firms to pass along price reductions in a seemingly automatic fashion.

- **Profit Implications**—An analysis of the economic impact of supplier price reductions, both good and bad.

### Price Reduction Rationales

There are two major reasons that firms pass along price reductions routinely. One of the reasons is strategic, the other operational.

**Strategic**—The strategic rationale is that price competition is endemic in distribution. A supplier price reduction provides the opportunity for firms to demonstrate their price aggressiveness to their customers.

Since the supplier price reduction is often short lived, some distributors view the price reduction as an opportunity to be “on sale.” That is, they can develop a price position that will provide a competitive advantage over competition. This rather blissfully ignores the fact that every other distributor has also had the same opportunity to purchase at lower prices.

**Operational**—The operational factor is that firms are still addicted to standardized mark-ups despite the rather substantial increase in pricing sophistication over the last ten years or so.

If an item generated a 37.5% gross margin before the supplier price reduction, then it should generate about the same gross margin after the price reduction. Gross margin targets vary by product velocity, of course. They also usually vary by customer type. However, once the margin is locked in, it tends to remain somewhat sacrosanct as product costs change.

The crux of the problem is that firms have to put prices on thousands of SKUs, the cost of which may rise and fall several times during the year. Few firms have the luxury of leisurely contemplating each individual pricing change.

Unfortunately, the advent of new technology has not changed the culture of standardized mark-ups. Again, the sheer magnitude of the pricing decisions to be made gets in the way. Such technology has made static-margin pricing decisions faster, but not better.

Whether the decision to pass along price reductions is strategic or operational, it still has the same impact on profit. Namely, it decimates it. Unfortunately, too many managers continue to believe that passing along price decreases associated with opportunistic buying “doesn’t cost us anything.”

### The Profit Implications

An understanding of the economics of passing through price reductions is provided by the PROFIT report conducted by AWRF. **Exhibit 1** examines the result for the typical AWRF member based upon that report.

As can be seen in the first column of numbers, this typical firm generates $10,000,000 in sales, operates on a gross margin of 37.5% of sales and produces a bottom line profit of 3.7% of sales or $370,000. In short, profit performance is adequate, but somewhat unexciting.
In looking at changes in pricing, it is necessary to break expenses out into their fixed and variable components. Fixed expenses are overhead items, or the cost of getting ready to sell. They only change when management takes an action.

In contrast, variable expenses are items which increase or decrease at the same rate as sales increases or decreases. The most obvious example is sales commissions. Other variable items include interest on accounts receivable, bad debts and a few additional, incidental items.

In most distribution businesses, fixed expenses account for about 80.0% of total operating expenses. In Exhibit 1 fixed expenses are assumed to be a constant $2,780,000 across modest increases or decreases in sales. Variable expenses are assumed to be 6.0% of revenue.

The last two columns of numbers in Exhibit 1 present the potential results, both good and bad, associated with an opportunistic purchasing opportunity. To demonstrate the impact clearly, it is best to examine the total firm. The same results would be produced for a segment of the business.

It is assumed that the firm is now able to buy everything at a price that is 2.0% lower than before. As a result, the cost of goods sold had been reduced by 2.0% for the entire firm. This is true in both of the last two columns.

The first column of potential results has been labeled No Price Changes. It really should be labeled Do This and Don't Even Think About Doing Anything Else. In this column the firm is using the supplier price reduction as an opportunity to enhance both its gross margin and its profit.

All of the reduction in cost of goods has been driven to both the gross margin line and the bottom line. The resulting increase in profit is dramatic. Profit has increased from the $370,000 original figure to $495,000, an increase of 33.8%.

The final column of numbers reflects the same opportunistic buying situation. However, prices outbound have been cut by 2.0% to mirror the 2.0% price reduction from suppliers. Again, this could occur either for strategic reasons or for operational ones. It makes no difference what the reason is. Profit takes a significant hit.

While the gross margin percentage remains the same, the gross margin is being generated on sales which have been lowered by the amount of the price reduction. Some expense reduction is attainable because of lower variable expenses, but fixed expenses hold constant. The overall result is that profit decreases by 17.0%, falling to $307,000. Whatever the good intentions of the reduction, profit suffers. Buying and pricing must be separate decisions.

Moving Forward

Pricing will probably always be the most difficult decision process for distributors. From a marketing perspective no firm wants to be under-priced. From an operational perspective, there are lots of pricing decisions to be made.

Despite these issues, there is a substantial gross margin and profit opportunity to be seized by avoiding an automatic response to opportunistic buying situations. Such situations must be used as a profit generator.

About the Author:
Dr. Albert D. Bates is founder and president of Profit Planning Group. His latest book, *Triple Your Profit!* is available at Amazon and Barnes & Noble. It includes Excel® templates for understanding the profit structure of the firm and developing meaningful financial plans.

A Managerial Sidebar:

A Price Cut That Would Maintain Profit

It is possible to estimate how much firms can cut their prices and keep profits exactly where they are at present. Unfortunately, an estimate is all that can be provided without some extensive financial manipulations.

The formula for holding profits steady is:

\[
\text{Current Cost of Goods Percentage} \times \text{Size of the Supplier Price Reduction}
\]

\[
62.5\% \times 2.0\% = 1.3\%
\]

To a certain extent, this represents something that maybe nobody should know. It creates a real temptation to cut prices “just a little bit” when opportunistic buying situations arise. Firms should not try to simply hold the line on profit. They should use supplier price reductions as a vehicle to improve profit.
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Press Release

I&I Sling® Inc. Celebrates 50-Years

This month, members of I&I Sling's management, sales and fabrication teams came together to celebrate the company’s semi-centennial near its headquarters in Aston, PA.

I&I Sling's founder, and keynote speaker for the evening's festivities, Dennis St. Germain Sr., provided plenty of laughs for everyone in attendance. As only he can do, Dennis delivered a detailed slideshow and added little known facts about previous and current employees, customers and products. Dennis went on to say, “I'm overwhelmed to see how far this company has grown from its humble beginnings. Since my retirement 6 years ago, my sons have continued this growth and I'm excited to see how far they will take it.”

I&I Sling Inc. was founded on September 25th, 1963 by Dennis St. Germain Sr. Five decades later, the company has grown to 100 employees with 6 full service rigging shops positioned from Massachusetts to Florida. The company is proud to be an original Slingmax® Dealer and holds the distinction of being the first sling manufacturer in the world to produce High Performance Fiber Roundslings. I&I Sling is also one of 10 Learning Centers for the Rigging Institute® LLC, a rigging training company headquartered in Knoxville, TN.

In 2008 Dennis retired from his day to day activities and named Scott St. Germain as I&I Sling's new President/CEO and Dennis Jr. as COO. I&I Sling’s other top management includes Robert Capone (CFO) and Tom DeSoo (Director of Sales).
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The Difference is BRIDON

A Commitment to Quality

The “Difference” is that BRIDON’s products are tested to destruction. The “Powercheck” enables us to satisfy ourselves that the minimum breaking strength has indeed been achieved or exceeded. Not all competitors carry out this test. Failure to meet the required minimum breaking force may mean that the design factor of safety for the equipment or machinery has been compromised.

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HOW ARE YOU LIVING TO A HEALTHY 100?

We hope you’ve all had a great summer and have enjoyed special times with family and friends! In the last issue of Slingmakers, we talked about the Healthy 100 principles of Environment and Activity and how each of these principles plays an important role in whole person health.

The next two Healthy 100 principles we will explore are Trust and Interpersonal Relationships. With all the calamity surrounding us, such as natural disasters, wars, and senseless crimes, we could be easily immobilized. But trusting in a Divine Power provides a sense of assurance for the future and in situations we don’t clearly understand. But more than this, research shows that engaging the spiritual component of our lives is vital to our health. With increasing evidence, medical professionals are more convinced that spirituality is a powerful aid in recovering from illness, as well as an important contributing factor to health.

Faith and trust play important roles in our relationship with others as well. Trust is central to every relationship in life. Trusting is to have belief and confidence in the honesty and goodness of others. It encompasses letting others know your feelings, emotions, and reactions. Imagine what a miserable existence it would be if we did not place faith and trust in one another.

Through science, we’re discovering that having strong interpersonal relationships can be beneficial, even vital to our health. Did you know that studies show the more friends you have, the less likely you are to catch a cold? Not only that, but if you do come down with a cold, the duration and severity of symptoms will be lessened if you have lots of social contacts. On the other hand, social isolation or loneliness can be devastating to good health. Friends not only increase your capacity for pleasure, but will enhance your ability to heal. People who feel lonely and isolated are more likely to smoke, overeat, abuse drugs, and work too hard. If you are feeling overcome by loneliness, or know someone who is, here are a few tips to help make a connection with others:

- Understand yourself first. Journal your thoughts and feelings. The more you understand about yourself, the better you can relate to others.
- Find a hobby or explore something new. You are likely to find people with some of the same interests as you and with whom you can establish a relationship. Have fun!
- Serve. Consider volunteering your time, talents or resources to a worthy cause. This is one of the most fulfilling ways to conquer loneliness.

- Trust in Divine Power. People who have a strong spiritual connection with a divine power tend to feel less isolated in the world and feel more acceptance.
- Try exercising. As we discussed in the last issue, exercise improves your mood and feelings of well-being.
- Get professional assistance. Sometimes loneliness may seem bigger than you can handle. If this is the case, choose professional help to get you back on track. Qualified counselors, mental health professionals, or clergy can offer the support and help you need.

Intimacy with Yourself: Being in solitude is very different from being lonely. Constant sound and visual stimulation have become so “normal” for us that we hardly notice it. However, moments of quiet are when we are most likely to hear our thoughts, feel our emotions, and to take our “spiritual temperature.” Schedule time in your calendar set aside just for you. Stretch, dance, walk in nature, read, journal, meditate, or do yoga. Do something that allows you to be quiet, but alive.

Intimacy with a Higher Power: Trusting in Divine Power doesn’t mean that bad things won’t happen, but it does bring rest to an anxious and stressed-out world. When we trust in Divine Power, we’ll achieve greater mental, emotional, and physical well-being.

Intimacy with Others: We all have people in our lives that we are the closest with and share our hearts, desires and passion. While not all of your relationships are ones in which you would reveal your innermost self, your interactions with the people you interact with on a daily basis can still be meaningful. Be kind to one another. Take the time to make eye contact with the checkout clerk in the store, address people by name, stop to help someone who is lost, or simply share a smile with a passing stranger on the street or in a store.

We are meant to share life with others. Knowing yourself, having a spiritual component in your life, and reaching out to others are truly secrets to living a long and fulfilled life.

We’d love to hear from you! Don’t forget to submit your personal wellness journey and photos of how you’re living to a Healthy 100! We also welcome stories on what you are doing as an organization to integrate healthy behaviors into your workplace. Submit your stories and photos to Barbara Gilbert at barabaraawrf@att.net.
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CASSELBERRY, Fla. August 21, 2013-In an event held on July 19 in Orlando, Florida, the Orlando Business Journal (OBJ) recognized Certified Slings & Supply as one of Central Florida’s fastest-growing, privately owned companies on its inaugural “Fast 50” list. The list ranks companies on their percentage of revenue growth from 2010 to 2012.

Certified Slings qualified with a 29% revenue growth, having met the requirements of being established by 2009 and achieving a minimum of $5 million in revenues in 2012. Commenting on his company’s inclusion on OBJ’s “Fast 50” list, CEO Douglas Worswick said, “This achievement was made possible by all of our customers, suppliers and team members. Sustainable growth is achieved when we all share and contribute to our mutual success.”

Certified Slings, which is celebrating 55 years as a family-owned business, has previously been recognized by the Orlando Business Journal as a “Healthiest Place to Work” winner, a recipient of the Harrington Hoist Distributor Excellence Award, and the Florida Family Business of the Year Award. The company has grown from one location in Casselberry to six Florida locations serving customers throughout the US, Central and South America, and the Caribbean. In the process, the company has expanded its ability to provide direct service to its customers world-wide. Certified Slings & Supply is an ISO certified manufacturer and distributor in the rigging industry for overhead lifting, load securement, contractor supplies and safety equipment. The company also offers safety seminars, testing and inspection services, engineering and design services, online shopping, and a 24 hour hotline for customer assistance. For more information: www.certifiedslings.com

Included on Orlando Business Journal’s Inaugural “Fast 50” List

Rank: No. 49
Description: Manufacturer and distributor in the rigging industry for overhead lifting, load securement, contractor supplies and safety equipment
Top executive: Douglas Worswick, CEO
Revenue growth rate: 2010-2012: 29 percent
Market strategy: To focus on growing our relationships with customers, and to promote our brand to potential customers in the Southeast as well as companies not yet on their future job sites by tracking winning bids through our CRM system; to grow online sales by continuing to add new products; to strengthen our worldwide sales and distribution
Accomplishments: OBJ’s Healthiest Place to Work winner; Harrington Hoist Outstanding Distributor Club; opened a service center in West Palm Beach; developed and branded “Bubba Rope,” the most-recognized off-road recovery rope made in the USA and sold worldwide; working with a manufacturer to improve products that will revolutionize the mining industry
Future plans: To grow through our present Florida service centers by offering new innovative products and services such as a mobile proof load testing; on-site inspections; a new state of the art interactive product showroom; mobile CSI product showroom; product and industry education center for our team and our customers’ continued education
We’re really fast at: Noticing negative trends due to market conditions, cost-cutting implementation when necessary and making team member changes if the person is not in the right seat

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Alex Peterson
Website: www.alliedpower.com
Email: sales@alliedpower.com

Manufacturing Member
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Jaap Gaakeer/Wim Fabricius
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Email: j.gaakeer@ropeblock.com w.fabricius@ropeblock.com
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Above It All

Perhaps the newest expression of haute cuisine is dinner for twenty-two, seated around a chef at a height of 180 feet above the ground, enjoying the ultimate open air dining experience.

A recent count reveals that approximately 1,000 people in forty countries are served each month at tables dangling in the sky. For relaxation and entertainment, cocktails are presented by tightrope walkers while suspended musicians accompany acrobatic dancers performing in apparatus similar to parachute harnesses. Obnoxious guests will be asked to leave the table immediately and truly offensive diners are admonished never to return – but of course they wouldn’t. People with weak bladders are encouraged to “go beforehand” as intermittent down-to-earth interruptions are very disruptive. Proper etiquette requires seat belts to be available for patrons with mild forms of acrophobia.

One of the entrepreneurial inventors, Stefan Kerkhofs, who grew up playing around his parents’ construction firm and later started his own bungee-jumping company, seems impervious to the inevitable liability issues of plein air sky dining. Safety precautions consist primarily of redundant attachments and a safety patrol. To help defer costs, the off-duty tables are converted to high profile billboards, attracting ambitious sponsors. In Saudi Arabia, where men and women are forbidden to mix socially, clusters of segregated tables are served by tethered wait staffers. Hanger steak is a consistent specialty of the house.

Although research discloses no plans for undersea dining, who knows? Wet suits and straws all around might just work, because some people are just weird.
Wire Rope Cable Plays a Crucial Role in Construction of Key Transportation Link

by Peter Hildebrandt

For anyone living in or visiting the New York Metropolitan Area the George Washington Bridge will mostly likely play a pivotal role. This bridge - locally known as the “GW” - and its distinctive steel “erector set” towers mean either home’s been reached or a trip begun as one crosses the Hudson River between New York’s Washington Heights and Fort Lee, New Jersey.

It’s hard to imagine a time without the bridge or what life would be like without its existence today. Aside from transporting people in cars from northern New Jersey into Upper Manhattan and the Bronx, the bridge has brought incredible growth and commerce through unending truck traffic to whole regions of the US Northeast, New York State, New York City and Long Island further east.

Although both the iconic Brooklyn Bridge and the George Washington Bridge are suspension bridges; that is where the similarity in design, construction, history and function ends. The Brooklyn Bridge connected two New York Burroughs; the GW Bridge has transformed life for millions in the region two states as well as brought vast development with its completion. When the bridge opened in October, 1931 it was the longest in the world – 3500 feet long. Simple wire rope cable has transformed an entire region of the country in countless ways with the volume of transportation it has made into reality.

The idea of spanning the Hudson with a bridge had first been proposed in the 1860s with the idea of cross the river with heavy rail lines. Due to the lengthiness of the span and the tremendous weight involved, that plan died – for the moment. Gustav Lindenthal, was the designer of several other New York area bridges, including the Hell Gate Bridge and Queensboro Bridges, originally had several locations in mind for a bridge across the Hudson River, including one at 23rd Street over to Hoboken, New Jersey.

Though the politically powerful railroads which would have benefited tremendously from such a location were thrilled, the city realized that too much land for approaches would have to be used. At that point, in the 1890s, Lindenthal could not find the backing for a bridge at that time either.

Lindenthal’s assistant, Swiss-born Othmar Ammann split from Lindenthal and eventually ended up becoming the chief engineer on the GW Bridge project. Ammann felt that Lindenthal, though a genius could not bring the needed moderation for such a project into his plans. Lindenthal proposed a structure with the, until then, unheard of price tag of one half billion dollars.

Ammann’s bridge design proposal in 1923 ultimately won out over all of the other entries for the bridge’s construction. Ammann became the Port of New York Authority’s new chief engineer, and construction started on the two 570 ft. towers; in the end these were just over 600 ft. of above water height, and would hold the suspension cables aiding in the support of the 4760 ft. long bridge between its anchorages on either side. For sports enthusiasts, putting 13 and 1/4 professional American football fields, including end zones, end-to-end to would give you approximately the total linear length from tower to tower of the George Washington Bridge.

Lindenthal loved to use I-bars in the construction of bridges. Such bridge construction takes longer to build but there is also less use of steel. For a cable suspension bridge such as the GW Bridge, with parallel cables, the amount of wires in the main cables cannot be varied, but such a bridge is also quicker to construct. Ammann’s scaled down plans for the GW Bridge and also moved further north to 179th Street where real estate was much less expensive and the distance across the water was the narrowest. The Palisades of New Jersey offered the chance for the bridge deck to be much higher off the surface of the Hudson, thus not interfering with navigation by tall ships.

The Port Authority hired Ammann in 1925 as master bridge designer and chief engineer. In October 1927 work on the foundations for the towers began. On the New York side a tiny neck of land was used for that side’s foundation. But on the New Jersey side solid land was over 70 to 60 feet below the surface of the Hudson River.

The John Roebling Company was awarded the contract to do the wire rope for the structure, being the low bidder on the bridge project. This is the reason the bridge ended up being a cable bridge. The Roeblings also did the cables for the Manhattan Bridge, Williamsburg Bridge, Golden Gate Bridge, Bear Mountain Bridge and a number of other suspension bridges.
To avoid caisson disease, also known as Decompression sickness or the “Bends” - something that plagued the workers involved with construction of the Brooklyn Bridge – this bridge project used coffer dams or the walling off of the water from the work area. During the first attempt using a coffer dam, one of the walls collapsed and three men died by drowning.

Another, stronger and more stable coffer dam structure was tried and that one held, was extremely safe and stable, allowing for the concrete foundation for the New Jersey tower to be poured. Ammann made some very farsighted and wise strategic decisions during the construction of the bridge.

One of these was to use natural Palisades cliff face as an anchor for the bridge. A 150 foot hole was drilled into the ancient volcanic rock for that purpose. The rock which was removed was then used as an ingredient in the concrete fill that was used. Once the towers were constructed the 26,474 pencil thick cables were spun to form the bridge’s four main cables which by the time they were completed weighed some 180 million pounds.

Spinning was done aerially. The main cables formed something of a hexagonal shape before being mechanically compacted and banded together. 107,000 miles of .196 inch diameter wire rope was used. There were 28,100 tons of wire rope in each of the four main cables. It took 300 workers 209 days to wire rope in each of the four main cables.

When the suspender cables were hung and the bridge deck began to take shape, Ammann again used his intuition about the structure of the bridge to make a decision. Typically a suspension bridge needs to have stiffening trusses beneath the deck to stabilize the structure and keep it from bowing and vibrating. Ammann felt that the weight and design of the bridge in this case may enable him to avoid using those trusses.

His gut instinct proved correct and the bridge has proven stable and secure since it opened over 80 years ago. Not as fortunate were designers of the Tacoma Narrows Bridge when they opted not to use those trusses. In 1940 that bridge, with a much thinner deck began vibrating like an aircraft wing and eventually collapsed dramatically.

Ammann also had the foresight to make the structure and all its suspender cables strong enough to hold up not just one deck but a second deck which in the 20s was assumed to someday carry a passenger rail system. But automobile traffic expanded far more than rail systems and the strength planned into the structure for a lower deck ended up being needed. The bridge is actually strong enough – incredibly enough - to support a third deck if needed.

In between each panel point, the space between each set of suspenders and there are eight per side, the load is approximately six to seven hundred tons. But the bridge is designed to handle that weight. At the center of the GW Bridge the deck changes some eight to ten feet.

All during the planning for the bridge in the 1920s the bridge towers were assumed to be someday constructed of masonry similar to what the Brooklyn Bridge looked like. But when the bridge was completed in the early years of the Great Depression, the money for such elaborate towers simply was not there. Ammann and architect Cass Gilbert’s plan to have a stone facade was shelved. As a result, the bridge’s exposed steel cross beams give it a modern look akin to that of the Eiffel Tower.

Though first known as the Hudson River Bridge, a public contest in 1930 with an especially large response from local school children, led to the naming of the bridge as the George Washington Memorial Bridge. Eventually “Memorial” was dropped from the name. Though double-decked now, the bridge originally had just one deck. Work started in October 1927 and opened to traffic in October 1931. At its opening, the GW had six lanes of traffic on a single deck. In 1946 two more lanes were added and in 1962 a second lower deck added to the bridge with six lanes of vehicles resulting in the bridge becoming the world’s only 14-lane suspension bridge.

U.S. Steel, who did not have enough steel to finish the Bronx Whitestone and Verrazano Narrows Bridges, had to have Roebling spin some of their wires into those bridges as well, according to George Washington Bridge history expert and area photographer, Dave Frieder, who is also at work on a book about the George Washington Bridge. "At some point in 2014 the Port Authority is going to replace all the suspender ropes on the GW Bridge; it’s not clear who will be the contractor supplying that wire rope,” says Frieder.

"The foot bridge – or catwalk - ropes are now actually the suspender ropes for the bridge. They started out holding up a platform for the workers as the main cables were being spun. After the main cables were spun, they then hung the foot bridges over the main cables.”

Frieder had a 142 pound connector piece leftover from the bridge construction which someone gave him. “Since I do a lot of lectures on the bridge construction, showing this piece, I’m now having a rubber model of the piece that will weigh over 100 pounds less for easier transport,” says Frieder. Continued on page 75
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As Director-Supply Chain, Bob Pridgen will have global coordination responsibility for all procurement and sourcing activity including suppliers, inter and intra facility logistics, and Crosby’s warehousing operations.

Bob is a native of New Jersey and earned degrees from Drew University and Rutgers University. After completing his MBA, Bob joined the United States Army and spent most of his active duty time with the Judge Advocate General’s Corps. After leaving the military, Bob worked for Ceva Global Logistics and most recently, Hilti Corporation.

With multiple facilities in North America and abroad, the Crosby Group manufactures premium accessories used in lifting and material handling applications for a wide range of industries ranging from oil and gas exploration to construction. The company, known for its uncompromising quality, premier customer service, and ‘world-class’ training programs, offers a broad range of products suitable for the most demanding of operating conditions. Products include wire rope clips, hooks, shackles, lifting clamps, hoist rings, overhaul balls, snatch blocks, crane blocks and sheaves.

In his new position, Curt Jabben will oversee and administer the sales process for Crosby solutions that require additional engineering, specialization, or modification in order to meet the widely varying needs of Crosby’s customers.

The majority of Curt’s 25 years with Crosby were within the marketing organization in various roles, and most notable, his 7 years as Marketing Manager. The last five years he has led Crosby’s efforts as the Product Manager for blocks and sheaves.

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As Director-Operational Excellence and Quality, Donna will be responsible for the global coordination of quality resources and programs as well as Crosby’s overall operational excellence activities.

Donna DeWitt comes to Crosby with extensive experience in Continuous Improvement and Quality, and she has worked in that capacity for some very reputable companies such as Owens Corning, CertainTeed, Schlumberger and most recently, Paccar Winch. She is also a six sigma black belt.

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Crosby is excited to be chosen as a partner for the world’s greatest living explorer, Sir Ranulph Fiennes, in his toughest challenge yet: a trek across the Antarctic in winter, known as ‘The Coldest Journey’. With the support of the Commonwealth and sponsors, including Crosby Europe, Sir Ranulph and five colleagues are currently testing the limits of human endurance in temperatures that fall as low as -90°C as they cover 2,000 miles in 6 months crossing the polar plateau.

Not only does the expedition aim to complete the first ever trans-Antarctic crossing during the polar winter, but importantly it is attempting to raise US$10 million for “Seeing is Believing”, a global charitable initiative to fight avoidable blindness. All donations will be matched by expedition sponsor, Standard Chartered.

Crosby is supporting this expedition with its full range of COLD TUFF® products, which are specifically manufactured to improve working in extreme environments. Crosby’s range of G-2130A (Grade 80) alloy shackles are forged, quenched and tempered, hot dip galvanized and DNV type approved. These features, along with other critical performance requirements such as ductility, an 8:1 design factor, as well as impact properties and full traceability, provide the needed reassurance when working in extreme environments like those expected during Sir Ranulph Fiennes’ expedition.

“As an innovator in the industry, this recognition of our brand is very rewarding. Our drive to assist working in these types of environments, from the demands of the energy markets to the safe transportation of vital equipment, makes this expedition very motivational to all involved in the design and manufacture of our equipment”, states Richard Oldknow, Sales and Marketing Director for Crosby’s European operations.

As with all users of Crosby equipment, Crosby is offering full support through training and worldwide technical support. “We are extremely honored to be supporting this project and aiding the continued efforts of ‘Seeing is Believing’ in this way”, adds Oldknow.

On December 6, 2012, the expedition team left London, bound for Antarctica. March 21, 2013, the equinox, the six expedition members began a six month journey to reach the Ross Sea. Using the very latest technological innovations, this mission will pave the way for year-round exploration in the Antarctic.
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The Center for Medicare and Medicaid Services (CMS) has quietly released yet another major requirement on employers who wish to remain compliant with the new law, yet publicly issued statements delaying the fines for not “offering” minimum essential coverage of an actuarial value of at least 60%. Which can be quite confusing to many employers. This article’s purpose is to help you eliminate confusion surrounding PPACA compliance, by answering one simple question; “What does all of this mean to my business?”

The new guidance requires all employer sponsored benefit plans to confirm compliance with all sections of Title I of the Affordable Care Act. For Self-Funded employer sponsored benefit plans this should also contain an Actuarial Certification that your plan meets the 60% Minimum Value requirement in addition to providing all the required benefits.

In our opinion, employers need to stay focused on compliance regardless of the recent decision by CMS to delay for one year the requirement that employer plans must cap deductibles, coinsurances and copays across plan options for both medical and pharmacy benefits. Employers are being required to submit a form which includes CERTIFICATION, that the plan complies with all of the provisions of Title I of the Affordable Care Act applicable to non-grandfathered health insurance coverage.

Further guidance on this particular piece of legislation has been needed since February of this year, however we’re now being made aware of that further guidance is, and have roughly 6 weeks left to comply and certify. We cannot claim we weren’t told, and a stay of execution on this piece of compliance could quite possibly be delayed between now and October 1st, however, delaying this would not be recommended in our opinion. Being proactive has proven to be the wise strategy thus far in the post PPACA business environment.

Below are the provisions we feel are what will be most pertinent and complex items to comply with and certify.

CMS Submits Proposed Form for Use in Obtaining Minimum Essential Coverage Certification for OMB Approval Excerpt from the Supporting Statement: “CMS will need the information to determine whether the plan sponsored by the requesting sponsor may be recognized as minimum essential coverage. CMS will maintain a public list of the types of coverage that have submitted this information and have been determined by the Secretary to meet the eligibility requirements to be recognized as minimum essential coverage. Consumers will also need to know that the types of coverage they are enrolled in are recognized as minimum essential coverage.

TITLE I of the Affordable Care Act —QUALITY, AFFORDABLE HEALTH CARE FOR ALL AMERICANS

“SEC. 2715 (b) (3) (G) (i) provides minimum essential coverage (as defined under section 5000A(f) of the Internal Revenue Code 1986); and (ii) ensures that the plan or coverage share of the total allowed costs of benefits provided under the plan or coverage is not less than 60 percent of such costs;

“SEC. 36B(C)(i)(II) ii) COVERAGE MUST PROVIDE MINIMUM VALUE.—Except as provided in clause (iii), an employee shall not be treated as eligible for minimum essential coverage if such coverage consists of an eligible employer-sponsored plan (as defined in section 5000A(f) (2)) and the plan’s share of the total allowed costs of benefits provided under the plan is less than 60 percent of such costs;

A copy of the form is available to AWRF members upon request. Again, unless this is delayed between now and October 1st, you will have to include reference to it in the notices you send to your employees by October 1, 2013. This is going to be potentially difficult to comply with and certify on such short notice, however, we’re here to help if called upon to do so.

Kindest Regards,
Ben Krambeck
Benefit Captive Re
5636 Ford Street
Norwalk, IA 50211
Phone: 515-681-7230

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Introduction: Ben Krambeck of Benefit Captive Re, (BCR) is on top of the ever changing rules and dates related to the Affordable Health Care Act. Below is a new update from BCR for companies who wish to remain compliant with the new law. If you have any questions, please call Ben Krambeck of BCR at (515-681-7230) or e-mail him ([LINK: compose.php?to=ben@benefitcaptivere.com] ben@benefitcaptivere.com). He will gladly answer any of your questions.

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McKissick® Roll-Forged™ Sheaves for the New Pacific and Atlantic Lock Complexes

Through an Authorized Crosby Distributor in Europe, Crosby® is pleased to supply several, 64.37in./1635mm diameter, roll-forged sheaves for a project concerning the Panama Canal Enlargement, known as ‘The Third Set of Locks Project’, commissioned by the Panama Canal Authority.

Six (6) chambers will each be equipped with 2 horizontal sliding gates. Each gate is powered by electric winches capable of opening the lock in 3 to 4 minutes. It is within these sliding gates that, 226 Crosby® sheaves, 64.37in./1635mm in diameter with a 1.81in./46mm wireline, will be used.

McKissick® Roll-Forged™ sheaves were chosen for this contract for a number of reasons. They are lighter, stronger and more wear-resistant due to our roll-forged process. Sheaves produced under this roll-forged method are more economical because less welding and machining are involved compared to conventional methods. These sheaves can be made lighter because the rolling process incorporates upsetting the sheave. The upsetting operation allows material to be gathered where needed, in order to support the rope, as opposed to starting with a thicker blank. Our sheaves are manufactured out of different materials in order to meet demanding requirements such as Charpy Impact Testing and rigorous hardness requirements in the groove. Crosby® is the only company who can manufacture a superior roll-forged sheave by the use of our proprietary upset roll-forged process.

Crosby McKissick® Products began manufacturing sheaves and blocks for the oilfield industry in the 1920’s and is now the largest supplier of aftermarket replacement sheaves for both land-based and offshore drilling companies. The McKissick® brand is recognized worldwide as a quality product that is designed specifically to withstand harsh applications.

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During the last several years there has been an increase in the number of accidents involving construction cranes at various job sites throughout the United States. Such incidents in New York, North Carolina, Texas and Illinois emphasize this fact. According to OSHA studies over many years the main causes of crane accidents have been electrocution, tip-over and sometimes structural failure. However, following these occurrences, there has been a noticeable increase in failure of booms due to breakage of boom hoist wire ropes (Photograph #1). These falling booms have resulted in multiple deaths to workers and massive property damage (Photographs #2 & #3).

Investigation into the root causes of these booms falling has shown that the boom hoist wire ropes have broken mostly due to wire fatigue breaks in the vicinity of the bridle or bail sheaves (Photograph #4) or on the equalizer sheave (Photograph 5).
The wire fatigue breaks in the outer wire rope strands not only occur on the crowns of the outer wires (Photograph #6) but also in areas where the outer strands contact the IWRC (Photograph #7) as well as at the contact areas, or valleys, of adjacent outer wire rope strands (Photograph #8). Of extreme importance, it must be acknowledged that multiple wire fatigue breaks within the IWRC (Photograph #9) develop concurrently or just prior to the wire breaks occurring on the outer strands.

Another source of breakage of boom hoist wire ropes can be on the drum of the boom hoist system. The very nature of the allowable smaller boom hoist drum diameter results in greater radial forces on the drum and wire rope, which exasperates the possibility of drum cross-over damage to the wire rope (Photograph #10). Incidents of wire rope damage due to unnoticed poor winding conditions have also been experienced (Photograph #11).

Regardless of the application of, it is inevitable that wire rope will experience wear and eventually accumulate broken wires from bending and loading conditions if left in service long enough. Other factors such as corrosion, heat, physical and/or chemical damage may also lead to deterioration of the wire rope. And as with all wire rope applications, installation, maintenance, proper operating procedures, inspection and replacement are critical in achieving safe operating conditions and maximum service life. Even under the best of operating conditions (excluding damage), all wire ropes must eventually be retired from service. And the critical element in knowing when to replace wire rope is based upon visual and hands-on inspection.
The current wire rope inspection procedures listed in ASME B 30.5 for Mobile & Locomotive Cranes and OSHA 1926.1400 discuss inspection intervals (Frequent and Periodic) and list the replacement criteria for wire ropes on cranes. While these inspection criteria seem adequate for the hoisting wire ropes, pendants and back-stays, it seems imperative that the inspection procedures for Boom Hoist Wire Ropes on cranes be expanded. Because of the inherent nature of boom hoist wire ropes normally wearing and fatiguing more rapidly than other wire ropes on a crane, it seems appropriate to direct more attention and to place additional emphasis on the inspection of boom hoist wire ropes.

This accelerated deterioration of boom hoist wire ropes is due to several factors:

a. More rapid wire wear from increased drum pressure on smaller diameter drums
b. More severe bending wire fatigue
c. A greater occurrence of impact & vibrational fatigue
d. An increased potential for significant drum crushing
e. Continual positioning of the same wire rope section on equalizer sheaves under loading and vibrational impact conditions

The formula shown in Figure A is used to determine the radial force developed between the face of a drum and the wire rope during loading conditions. It can be concluded from the formula that a greater force is exerted on a smaller diameter drum than on a larger one.

Figure B shows the average data collected from bending fatigue tests on wire rope conducted at a wire rope research laboratory. These tests involve the use of 3/4", 6 x 25 Filler Wire, Right Regular Lay, EIP, IWRC wire rope cyclically operated around steel sheaves with 180 degrees of contact and D/d ratios of 18/1 and 15/1. This wire rope construction is commonly employed on main hoist lines and boom hoist lines on construction cranes, so this data is comparable to actual field applications. The D/d ratios of 18/1 and 15/1 represent the minimum t allowable tread diameter sheaves used on hoist lines and boom hoist lines respectfully, as listed under the ASME B 30.5 standard. The data revealed in this chart emphatically shows that a wire rope operated around the smaller diameter sheaves results in a significantly reduced service life of the wire rope as compared to a larger diameter sheave.

Observation of a crane in operation or during transit reveals that the boom hoist wire rope is subjected to constant vibrational loading, and even without a live load on the hoisting lines, the boom hoist wire rope continually carry the resultant weight of the boom, a percentage of the hoist line, sockets, blocks, sheaves, headache ball and other below-the hook-attachments. So it can be concluded that a boom hoist wire rope is most always being subjected to loading and vibration.

Because of the fact that boom hoist wire ropes are more difficult to closely inspect near the bridle, gantry and equalizing sheaves, it seems imperative to expound on the frequency of inspection; to provide more details on inspection procedures to detect possible wear, broken wires and damage on the boom hoist wire ropes; and to explain in more detail the types of wire breaks that can be expected on these wire ropes.

While periodic inspections (1 to 12 month intervals) require documented inspection of the entire length of wire rope, frequent inspections (daily to monthly) do not under current ASME standards and OSHA regulations. It is possible that a wire rope may not reveal any broken wires at the time of an annual inspection, but during the intervals between the annual and monthly inspections, the wire rope may develop multiple broken wires that could exceed the retirement criteria as listed in ASME B 30.5 standard and OSHA 1926.1400. Such an accumulation of broken wires presents a dangerous situation which may quickly result in a boom hoist failure. This is the reason that daily or more frequent inspections are critical in discovering the onset of wear, broken wires or damage during the intervals of the annual and monthly inspections, especially as the wire rope approaches the end of its useful life.
In 1987, wire rope fabricators and distributors found it difficult to obtain adequate products liability insurance at consistent, affordable rates. That crisis prompted a group of wire rope fabricators and distributors to form their own Captive – Select Insurance Group of North America, Ltd. (S.I.G.N.A.L.). 

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AWRF is pleased to announce this year’s winners of the Scholarship Awards. As usual the competition was fierce and we applaud the winners and encourage everyone to try again next year.

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**Jason Tyler Coles**  
"Jurgen Prohaska Award"  
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Louisiana State University

**Kate Ashley Rollins**  
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Bridon International launches exclusive partnership with Kanoo Machinery at customer-focussed technical conference

Bridon International, the global technology leader in the manufacture of steel wire and fibre ropes, hosted a customer-focussed technical conference on the 21st May 2013, at the Grand Ball room, Mövenpick hotel Al Khobar, Saudi Arabia. The technical conference gave Bridon the opportunity to launch its partnership with Kanoo Machinery, its exclusive stockists of crane and industrial lifting products for Saudi Arabia, and firmly mark its position in the area.

Bridon’s partnership with Kanoo Machinery was launched publically at the conference with an introduction by Bob Jennings, General Manager, Kanoo Machinery, followed by an introduction by Steve Hodgkins, General Manager, Bridon Middle East.

Bridon’s lead technical specialist, David Hewitt, led the remainder of the event, conducting various training sessions over the course of the day. He covered key aspects of the steel wire rope industry, including design, testing, manufacturing and vital information on the best practices to ensure longevity of products and safety of personnel.

Over 40 major drilling, steel, mining and construction companies participated in the event, covering a broad spectrum of representatives from management to technical and ground personnel. The event proved to be an insightful and illuminating day and was well received by the customers involved.

Antoine Chartouny, General Manager, OFSAT ARABIA (LLC), remarked:
“The seminars enabled me to acquire valuable information on wire ropes and I now feel that I am in a position to understand many important details when placing any significant orders. I am confident that I can discuss the most appropriate ropes for our operations with my field people, as well as the best way of deploying these products in a variety of challenging applications.”

The customer interaction at the event also gave Bridon a wider perspective of the market in Saudi Arabia. This provided the company with the understanding to recommend and supply unique specifications of its products to meet individual customers’ needs.

David Hewitt, Technical Application Specialist at Bridon, said:
“The day was a success, with a really strong turnout. It was a great opportunity for us to further develop our in-depth understanding of our customers’ needs in this region, and to collaborate with them on tailor-made solutions for some of the toughest challenges they face.”

In November 2012, Bridon opened a £30 million state-of-the-art factory in the UK that is able to manufacture the largest and most complex ropes ever made, in package weights of up to 650 tonnes. Soon after, in February this year, the company launched the Bridon Technology Centre, one of the world’s most advanced facilities for the development and testing of offshore ropes. These investments give Bridon the capacity to produce highly engineered ropes boasting enhanced breaking loads, optimised bend fatigue performance, effective lubrication, and minimal rotation under load – firmly marking the company out as the global technology leader in the manufacture of steel wire and fibre rope solutions.
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Five course dates scheduled in 2013

Industrial Training International Canada is proud to announce the opening of its newest training centre located on the Enform Campus in Nisku, Alberta. ITI’s Edmonton Training Centre will serve Canadian students, with its travel-friendly location less than 5 minutes away from Edmonton International Airport.

The positioning of the Edmonton Training Centre will certainly be a boon to the large number of oil and gas personnel conducting lifting and rigging activities in Canada. A number of ITI instructors have conducted training courses on location at in situ oil sands projects, and will bring valuable experience to the course sessions at the Edmonton Training Centre.

The 2013 course schedule will feature five initial dates:

- **Lift Director & Critical Lift Planning** - October 31-November 1, 2013
- **Rigging Gear Inspector** - December 2-4, 2013
- **Lift Director & Critical Lift Planning** - December 5-6, 2013
- **Master Rigger** - December 9-12, 2013

ITI has outfitted its newest Training Centre with over $100,000 of state-of-the-art rigging and lifting equipment making it the premier training location for cranes, rigging, and lifting in Western Canada. With over 30 classrooms, an enormous indoor facility, and acres of outdoor training space, the training centre hosts a multitude of rigging equipment, overhead and mobile cranes, and over 25 live load-moving stations at this location.

ITI plans to release its 2014 schedule in the coming weeks, which will include a full slate of courses in Edmonton, in addition to courses at Training Centres in Woodland, Washington and Memphis, Tennessee.
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The new 40T Swager can be used either vertically, horizontally or upside down. Options such as a stabilizing plate or a tilted adjustable stand are available. The Swager offers total flexibility and is easy to use in the field due to its light weight and easy operation.

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During the annual inspections which require that the boom be lowered, it is suggested that the tension on the boom hoist wire rope be relieved. This will allow the inspector to closely view and flex the wire rope to expose possible existing broken wires, especially valley wire breaks, which are known to develop in boom hoist wire ropes. These wire breaks mostly occur in the wire rope sections operating around the bridle, gantry and/or the equalizer sheaves. The lowered position of the boom will also allow the inspector to examine the total length of wire rope around its entire circumference. To facilitate inspection for broken wires, a soft, cotton cloth should be lightly rubbed along the wire rope to aid in detecting outer wire breaks on the crowns of the strands and valley wire breaks that are protruding from between the outer wire rope strands. Flexing or bending of the wire rope in the areas that operate over sheaves can also reveal existing valley wire breaks that may not be as obvious in a straight configuration. It is the opinion of the author that such flexing of the wire rope during annual inspections be included in this inspection process of boom hoist wire ropes. Diameter measurements should be taken along the length of wire rope, especially in areas where the wire rope has been operating through the sheaves. Such measurements can indicate outer wire wear or possible internal damage to the IWRC.

Presently, periodic inspections require a written dated report, whereby frequent inspections do not. It is being suggested to ASME that a signed inspection record be required for frequent inspections, and that the person performing the frequent inspections be specifically trained to become competent in assessing the condition of the wire rope as it travels around the sheaved and drum. Although flexing by hand of the wire rope under tension is not possible in this scenario, it is suggested that the boom be lowered or raised several degrees to allow the boom hoist wire rope to travel several feel through the sheaves. This movement of the boom hoist wire rope around sheaves and drum will flex the wire rope and will greatly increase the ability of discovering wire breaks that may exist.

It is being proposed to ASME that these additional instructions be stated in the new, upcoming ASME B 30.30 Standard on wire rope (which will replace the wire rope information presently in ASME B 30.5) as a supplement to the existing ASME B 30.5 wording for general wire rope inspection instructions. The current ASME B 30.5 Standard is as follows:

1) In running wire ropes, 6 randomly distributed broken wires in one wire rope lay length, or 3 broken wires in one strand in one wire rope lay length
2) In rotation-resistant wire ropes, 2 randomly distributed broken wires in six wire rope diameters, or 4 randomly distributed broken wires in thirty wire rope diameters
3) One outer wire broken at the point of contact with the core of the rope that has worked its way out of the rope structure and protrudes or loops out from the rope structure
4) Kinking, crushing, birdcaging or any other damage resulting in distortion of the wire rope structure
5) Wear of 1/3 the original diameter of outside individual wires
6) Evidence of any heat damage from any cause
7) Reduction from nominal diameter exceeding 5% of its nominal diameter
8) In standing wire ropes, more than 2 broken wires in one wire rope lay length in sections beyond end connections, or more than 1 broken wire at an end connection. Also as stated in (3), 1 outer wire break that is protruding from between the valleys of the wire rope

Emphasis must be placed upon more comprehensive inspection procedures of boom hoist wire ropes, along with including additional information within the ASME Safety Standard on the inspection and replacement criteria of boom hoist wire ropes. As a supplement to expanding this inspection information, it is imperative to enhance the training of wire rope inspectors and in educating them on the critical nature and importance of such a comprehensive inspection procedure.

Donald L. Pellow- P.E.
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The Ulven Companies are pleased to announce the hiring of Dowen Raynor as an Engineering Sales Manager within their Houston Structures business. In this position at Houston Structures, Raynor’s main accountability is for global field sales activities.

Tammy Sievers, Director of Human Resources at Ulven said, “We were looking for a skilled technical sales professional who could help our company continue to attain our growth goals and establish our product acceptance in the marketplace. We feel we have found this person in Dowen.”

Dowen has a MBA from George Fox University, a M.S. in Metallurgical Engineering from University of Idaho, and a B.S. in Civil Engineering from Boise State University. He is also Six Sigma Green Belt certified. Dowen has over 15 years of sales, engineering and manufacturing experience in areas such as commercial casting design, blueprint-to-production activities and leading a global product team.

Houston Structures supplies the cast, forged, machined, and fabricated structural support products the world depends on for Hydroelectric, Bridge, Structural, and Mining Industry projects.

The Ulven Companies have been in the forging industry for over 40 years – starting with the founding of Ulven Forging, Inc. in 1971. The Ulven Companies now comprise a group of four different American companies and are privately held. Each company has its unique set of process capabilities in different areas of the industry and is known for bringing high quality, cost-effective products to its customers with reliability and integrity.

Contact: Dan Ulven, President TUC 888-558-9779

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The Tulsa, Oklahoma, based Crosby Group, a global leader in accessories for lifting and material handling applications, has announced the promotion of Jeff Ferchen to the role of National Sales Manager-U.S. for The Crosby Group, Andy Vogl to The Crosby Group as the Vice President-Sales and Bob Myers as the Block and Sheave Product Specialist for The Crosby Group.

Jeff Ferchen will be responsible for coordinating all Crosby Group sales activity as it relates to the U.S.-based sales team and distribution partners. For the past three years, Jeff has been serving as Crosby’s Northwest Regional Manager, and was a District Manager for five years as well. Prior to joining Crosby, Jeff was a territory sales manager for Cooper Tools. His industry experience, leadership style and professionalism will allow him to excel in this role.

With multiple facilities in North America and abroad, the Crosby Group manufactures premium accessories used in lifting and material handling applications for a wide range of industries ranging from oil and gas exploration to construction. The company, known for its uncompromising quality, premier customer service, and ‘world-class’ training programs, offers a broad range of products suitable for the most demanding of operating conditions. Products include wire rope clips, hooks, shackles, lifting clamps, hoist rings, overhaul balls, snatch blocks, crane blocks and sheaves.

As the VP-Sales, Andy Vogl has oversight for Crosby Group sales on a global basis. Andy’s 30+ year career has been spent in sales leadership roles for diversified industrial companies who mainly have used value-added distribution as their chief channel to market. For the past 12 years, he has been a Vice President of Sales for Danaher Corporation in their motion and control businesses. Prior to that, he was part of a newly-formed company, Automation Solutions International (ASI), which included a manufacturer as well as several industrial distributors. He served as the Vice President-General Manager for the Western region until Danaher acquired the manufacturing portion of that business. Before that he held key sales roles with Danfoss Inc. and Parker Hannifin Corp., which again are companies that embrace sales philosophies and channel strategies very similar to The Crosby Group.

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In his new role, Bob Myers is responsible for sales and marketing support for Crosby’s distribution partners, OEMs and end users who have chosen or are considering Crosby blocks and sheaves for their lifting solutions. Bob will be working closely with multiple resources within Crosby to identify new product innovations, develop new tools, promote Crosby's design and performance benefits, and assist the extended Crosby sales organization along the successful growth trajectory that the block and sheave product line has enjoyed to date.

Bob brings a tremendous amount of industry knowledge and experience that he earned over a prominent career in sales with Gunnebo Johnson that spanned 30+ years. Most recently, he lead the sales efforts of Paccar Winch until joining Crosby. Bob’s long term relationships with distribution, OEM’s and end users will serve him well in his new role.

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“Most of the people that we are dealing with have been in the industry for many years. They are teaching people under them how it all gets done. Every day is a concern for us. Everything we do in the wire rope or rigging industry has the potential for failures or complications. But 99% of the time that failure is due to human error; it’s not the product that is failing."

These days everything involved is double and triple checked before it is used, according to Rubin. “There is a certain amount of caution involved with the equipment and how it is used. Those using it set it up a certain way, are very cautious in what they are doing and then never deviate from using it that way. All our products are made to a federal specification. This, however, doesn’t mean that it will be put together properly out in the field. If the individuals involved do not set it up this way there can be problems.”

Rubin uses domestic or imported wire rope depending upon the customers. With domestic products everything has been tested and meets federal specifications. The entertainment industry uses mostly domestic products according to Rubin. All their shackles and turnbuckles as well as connections are manufactured in this country. “Most of all the synthetic rope is made domestically and that’s a big part of what they use for hanging a lot of the items in the industry.

“What the different studios or entertainment centers use varies from year to year. Universal will rent their studios to the company that comes in and produces the movie. They use all different kinds of items in the industry and it’s amazing how much the entertainment industry consumes of all the various rigging products, scaling and mountain climbing products. This includes every type of TV show out there. Everything is above the heads of those involved, such as lights – not just cameras.”

Jack Rubin and Sons also supplies all the rigging for the Broadway show “Spiderman.” In the beginning, as was pointed out in the media, the show had some difficulties to work out. “Now the show is doing very well and we’re supplying all their rigging and sling needs. I think on the first efforts they had some complications with the show before they got it right. We came in about a year after the show finally opened”.

“We supply a lot of different things; we are not just in the rigging business. We are basically in the safety business and supply a lot of fall protection equipment as well, taking into very careful consideration what the customer’s needs are to make sure they get what they want. With the initial phone call we make certain that everything is taken care of from the start.”
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Wire Rope Cable Plays a Crucial Role in Construction of Key Transportation Link

Continued from page 25

“I use this connector to show the news media why they are replacing all of these suspender ropes. Water works its way into the socket and – despite the ropes being galvanized – can deteriorate the wire ropes enough to break, something you don’t want to happen. “Since the bridge is over 80 years, they are going to replace all of the suspender ropes. The contract has not been awarded yet; no bids have gone out yet. But the bridge is so strong that it could hold three decks instead of the current two. Suspender protectors are now all along the bridge just as on other area bridges to protect against any terrorist attacks. These ruin the look of the bridge in my opinion.”

When the bridge was finally completed it came in one million dollars under budget and eight months ahead of schedule. The lower deck was started in 1959 and with its 1963 completion; the bridge was finally finished – although important renovations, such as the replacement of the suspension cables will go on for some time after the tentative start date of 2014.

The George Washington Bridge is fairly wide at 119 feet - including the North and South sidewalks where pedestrians and bicyclists cross the bridge. Its roadway section width is 90 feet and at mid-span the deck is an astounding 212 feet above the Hudson below. Initially the cost of the bridge construction was only about 59 million dollars, though the Port Authority has invested well over a billion into the structure into the 2000s. The area has clearly gotten its money’s worth from the bridge which remains the world’s busiest traveled bridge.

Travelers and commuters would be hard pressed to argue with that as they patiently wait to cross the Hudson whether going east or west. Most of those stuck in their vehicles probably have never heard of Othmar Ammann either, but the bridge’s designer and chief engineer was responsible for not only the George Washington Bridge, but also much of the rest of New York's bridge and tunnel system, critical to its survival and existence.

“Were the bridge not there people would have to take a ferry ride to go to grandma’s house on the holidays,” adds Frieder. “It’s hard to imagine our world without the George Washington Bridge.”
Lift-It Manufacturing Company, Inc., a leader in the production of slings, tie downs and cargo nets and a provider of premier training celebrated 34 years of successful operation and service to the rigging industry on September 3, 2013.

Michael J. Gelskey, Sr., Chief Executive Officer commented, “It seems hard to believe that we went into business at a time when banks were standing in line to lend $400,000.00 to me, a 24 year old entrepreneur at prime rate which was somewhere north of 18%. Private funding it was at 2% over prime! Failure was not an option and all the hard work and sacrifice have certainly paid off”.

The company anniversary was celebrated with a pastrami sandwich feast, complete will all the extras and the appropriate libations. Two of the original five employees were present, Gelskey, Sr. and Wolfgang Keil.

At the celebration Mike Gelskey, Jr., Vice President and General Manager announced to the group that

Lift-it had successfully completed the process for a documented a self-assessment CE Mark approval program to complement its already stringent quality control processes. CE Mark approval will facilitate products to be sold in the European Union.

Mike Gelskey, Jr. stated, “We have always had stringent quality and inspection practices in place since our start in 1979. That was complimented by our registration and dedication to ISO9001 and recently to AS9100 registration. This is the next logical step to keep us in the forefront of our industry peers and in the eyes of our customers”.

“We look forward to entering strategic markets which will reveal viability for our company, our family of employees and serve as a catalyst for expansion across the EU and to other significant markets, including the USA.”

“Developing the ability to perform self-assessment CE Marking on our products signifies a significant milestone and achievement by everyone at Lift-It Manufacturing Company, Inc.” stated Michael J. Gelskey, Sr. “This new concept exemplifies that we have met the rigorous quality and performance requisites set forth by the European Union authorities and expresses our commitment to the safety of our customers.”

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I Bite, But I Won’t Chew!

Non Marring Lifting Clamps From Renfroe

When you need to lift or move products with smooth surfaces composed of stainless steel, copper, aluminum or other polished metals, you cannot afford to use a clamp that chews into that finished surface. J.C. Renfroe has created the first line of non marring clamps that grip but does not damage metal surfaces. Ask for the Renfroe models - NM, NMA, NMBC, NMBL and NMRSC. They are supplied with stainless steel gripping surfaces and are available in steel or bronze upon request.

Once you have tried a Renfroe non marring clamp, you’ll love that puppy!

Call 1-880-874-8454 for the name of your nearest distributor