

06

No More Estimates
for Maritime Containers

16

A Revamped
IARW-WFLO Convention

20

Social Responsibility
Can Address Recruitment
and Retention Woes

24

Freezing Out Frost Heave

26

Port of Baltimore
Open to the Cold

29

Check This Out

DISASTER OR REDEMPTION?

The mistakes and near misses of others can inform your own warehouse best practices. [page 10](#)



THE OPTIMAL COLD SERVICE SYSTEM

offering proven products for a truly integrated system



ZeroPerm® Vapor Barrier
(or INSULRAP™ 30-SJ)

STYROFOAM™
XPS Insulation

VAPORGUARD™
Butyl Vapor Stop

RG-2400® LT
Corrosion Gel



Polyguard can now supply Dow® Styrofoam™ pipe insulation to the refrigeration market for the first time completing the introduction of its' optimal Cold Service System.

Major food producers in North America, who have been long-time users of Polyguard's ReactiveGel® corrosion preventer in combination with Polyguard's ZeroPerm® vapor barriers can now specify an entire insulation system to minimize downtime and extend the productive life of their low temp pipe installations.

The optimal Cold Service System starts with RG-2400® gel on the pipe to prevent corrosion. Dow® Styrofoam™ insulation provides long-term stable R values and is the preferred product for low temp applications. Cover the insulation with either Polyguard's ZeroPerm® or Insulrap™ vapor retarders to keep the insulation dry and then complete the system with Polyguard's Alumaguard® family of flexible weatherproof cladding products.

Polyguard can offer a truly integrated system that offers peace of mind and components that have been time-tested in the marketplace. For more information, scan the QR code with your smart device.



214.515.5000

www.PolyguardProducts.com

FOLLOW US ON OUR SOCIAL NETWORK



Polyguard®

Innovation based. Employee owned. Expect more.

DEPARTMENTS

- 31 Member News
- 32 Association News
- 32 New Members
- 33 SAC Solutions
- 33 Calendar

COLUMNS

- 04 Leadoff
- 34 Cool People



About the Cover

Mistakes and near misses in the warehouse can be hair-raising but also great learning experiences. Learn more in the cover story, "Disaster or Redemption?" on page 10.



FEATURES

06

No More Estimates for Maritime Containers

New weight verification requirements go into effect July 2016.

By Lowell Randel

10

Disaster or Redemption?

The mistakes and near misses of others can inform your own warehouse best practices.

By Alexandra Walsh



16

A Revamped IARW-WFLO Convention

Celebrating 125 years of cold chain excellence, more keynoter and new educational formats.

By Alexandra Walsh

20

Social Responsibility Can Address Recruitment and Retention Woes

Support of international causes attract and engage employees.

By Sheryl S. Jackson

24

Freezing Out Frost Heave

Finding solutions to this problem on the online forum demonstrates value of the GCCA Network.

By Sheryl S. Jackson

26

Port of Baltimore Open to the Cold

Cold chain logistics operator shows Baltimore's reefer side.

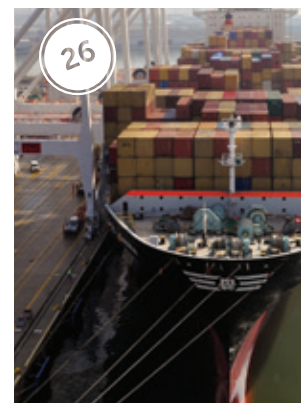
By Karen E. Thuermer

29

Check This Out

A Hazard Assessment Checklist is important to a company's well being.

By Keith Loria



Building on a Talented Industry

DURING THE PAST YEAR, delivering value and developing talent have been priorities for IARW and WFLO and have driven our joint efforts to move the cold chain industry forward. We are pleased to report successes on several fronts.

First, the 52nd WFLO Institute in early February was a rousing success, drawing 400 students to the Georgia Tech Hotel and Conference Center in Atlanta, Georgia for this annual four-day training program in all facets of cold chain management and operations. The WFLO Institute will also expand with another Institute being held in the Western United States in March at the University of California, Los Angeles (UCLA).

The WFLO Institute in Latin America, to be held June 27-29, 2016 in Panama City, Panama, is now in its third year, and many members in the rapidly growing Latin American cold chain market have found value in sending their employees to this three-year training program modeled off the original WFLO Institute.

Change is also coming to the 125th IARW-WFLO Convention, to be held in Las Vegas, Nevada, April 16-19, 2016. This event is now reconfigured to serve senior-level executives with four keynote speakers focusing on business issues facing the cold chain along with peer-to-peer executive roundtables, entrepreneur encounters, and cool pioneers learning arenas.

The traditional convention expo component of the IARW-WFLO Convention has moved to the Global Cold Chain Expo (GCCE) taking place in Chicago, Illinois, June 20-22, 2016. It is a partnership between GCCA and United Fresh and will be co-located with FMI Connect, the International Floriculture Expo, and the United Fresh Show.

GCCE offers a new educational opportunity for mid-level to upper-level managers, directors, plant managers, and vice presidents who work on the operational side of the cold chain business. Sessions will focus on cold chain best practices, transportation,

engineering, and the supply chain.

GCCA is also co-locating the popular WFLO Graduate Institute with GCCE, offering this event from June 18-22, 2016 in Chicago. Now in its third year, this high-level program continues to grow as more cold chain professionals graduate from the WFLO Institute.

Each of us has traveled extensively this year and we thoroughly enjoyed getting acquainted with our members nationally and internationally. The global connections we have made in this process are vital as the cold chain business continues to become more interconnected across the globe and GCCA reaches out to provide more worldwide education and business opportunities to attract a new set of future leaders. ☺



ANGELO ANTOCI
IARW Chair



GREG BRANDT
WFLO Chair

COLDFACTS

COLD FACTS magazine is published every other month by the **Global Cold Chain Alliance (GCCA)**, an organization that unites partners to be innovative leaders in the temperature-controlled products industry. The GCCA Core Partners are:

The **International Association of Refrigerated Warehouses (IARW)**, which promotes excellence in the global temperature-controlled warehouse and logistics industry.

The **World Food Logistics Organization (WFLO)**, which delivers education and research to the industry and empowers economic development by strengthening the global cold chain.

The **International Refrigerated Transportation Association (IRTA)**, which cultivates, fosters and develops commercial and trade relations between all those engaged in the transportation and logistics of temperature-controlled commodities.

The **International Association for Cold Storage Construction (IACSC)**, which provides a forum for innovative ideas, promotes standards of practice, and sponsors professional education programs for the cold storage construction industry.

CONTACT US:

COLD FACTS Magazine
Global Cold Chain Alliance
Attn: Megan Costello
1500 King Street, Suite 201
Alexandria, Virginia 22314-2730 USA

tel +1 703 373 4300 fax +1 703 373 4301
mccostello@gcca.org | www.gcca.org

COLD FACTS welcomes editorial ideas; contact Editor-In-Chief Al Rickard at +1 703 402 9713 or arickard@associationvision.com. Contact Mike Derda at +1 415 883 7555 or mderda@associationvision.com for advertising opportunities in GCCA publications.

Design by SWALLIS Design, San Francisco, California, USA.

While the material in this publication has been compiled with care, the Global Cold Chain Alliance (GCCA) has not validated all of the information contained herein and does not assume any responsibility for its use, accuracy, or applicability. As used above, GCCA shall mean the organization, GCCA Core Partners, and each organization's directors, officers, employees, volunteers, members, and agents.

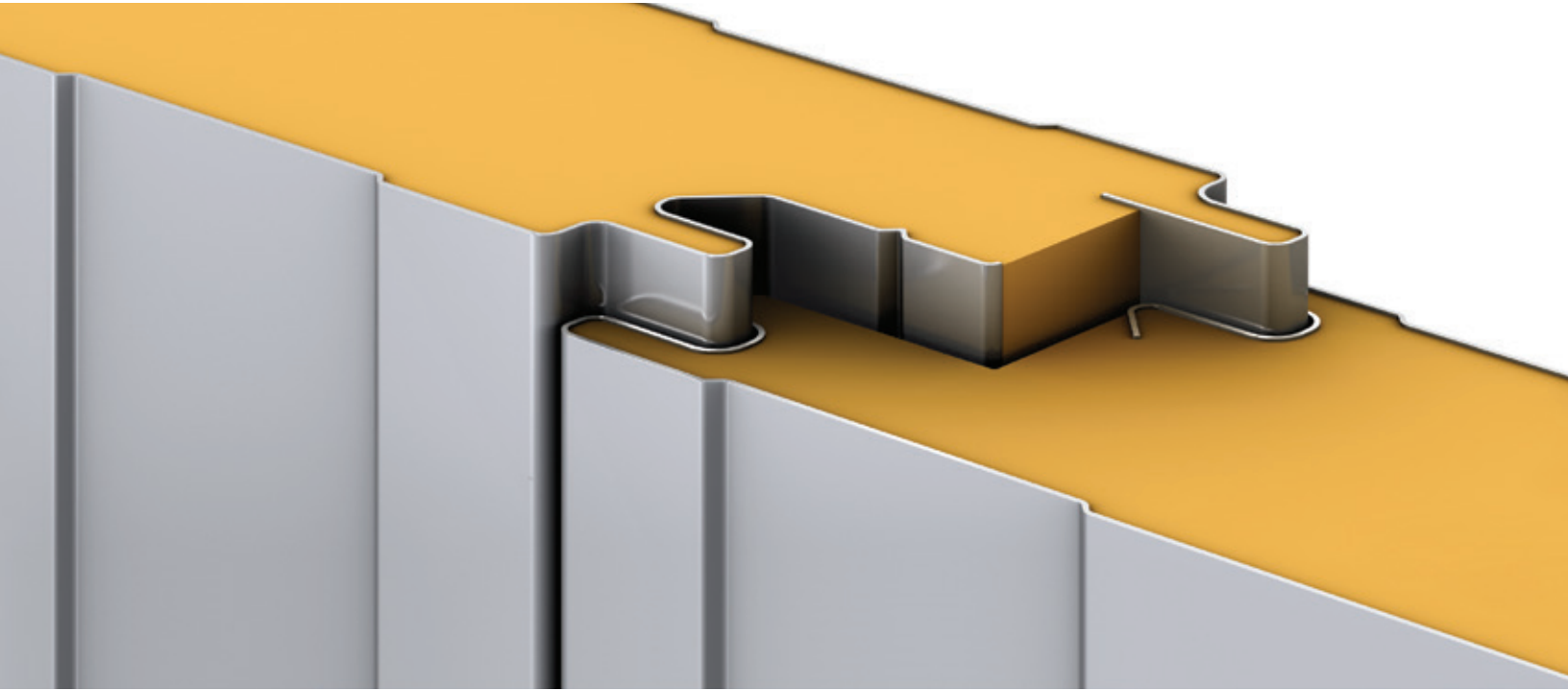




GREEN SPAN PROFILES®

INSULATED PANEL TECHNOLOGIES

MANUFACTURING INSULATED METAL PANELS SPECIFICALLY FOR THE COLD STORAGE INDUSTRY



FM
APPROVED

- Unsurpassed Product Quality
- Ultra-Competitive Pricing
- On-time Deliveries
- Superior Thermal Performance
- Outstanding Structural Performance
- Available in USDA Painted, Plastisol and Stainless Steel



"We are proud to be your domestically owned and privately operated insulated metal panel provider." – Kelly Ginn, President

GreenSpanProfiles.com • 844-807-7400

NO MORE ESTIMATES FOR MARITIME CONTAINERS

New weight verification requirements go into effect July 2016.

By Lowell Randel

The International Maritime Organization (IMO) is the United Nations specialized agency with responsibility for the safety and security of shipping and the prevention of marine pollution by ships. IMO has the authority to administer the International Convention for the Safety of Life at Sea (SOLAS). Over 170 countries, including the United States, are parties to the convention and are subject to its requirements.

In November 2014, IMO amended its regulations to require that a packed container's gross weight must be verified before being loaded onto a ship. The revision was enacted in response to concerns about the safety of containers that may have inaccurate declared weights.

The new rules take effect on July 1, 2016 and will impact GCCA members involved in the maritime shipping and transport of loaded containers. Once in effect, it will be a violation of SOLAS to load a packed container onto a vessel if the vessel operator

and marine terminal operator do not have a verified container weight.

Under current practices, customers provide a tentative weight at the time of booking. The gross weight of cargo is being provided in the shipping instructions that are considered for the final load list. The IMO is concerned that 10 percent of the shipping instruction may currently be received post vessel cut off, which can lead to load list weights being prepared based on estimated weight.

The SOLAS Amendment places the responsibility for providing a verified weight

on the shipper. For purposes of the provision, a shipper is defined as "a legal entity or person named on the bill of lading or sea waybill or equivalent multimodal transport document (e.g. "through" bill of lading) as shipper and/or who (or in whose name or on whose behalf) a contract of carriage has been concluded with a shipping company."

Examples of shippers include the beneficial cargo owner, the non-vessel-operating common carrier and the entity that consolidates the cargo (master loader). The shipper must provide the weight information to the vessel-operating common carrier in advance of vessel loading.

The SOLAS Amendment provides two methods for establishing a verified container weight.

Method One

Once a container has been packed and sealed (using calibrated and certified equipment), the shipper must either weigh the packed container or arrange for a third party to weigh the packed container.



Smarter than the average air.

Settling for an evaporator that bases its performance ratings on average or median room air temperature can be a costly mistake.

Good thing there's the SST-B Series from EVAPCO.

Our evaporators are AHRI certified to perform based on air temperature entering the coil (DT1 Method)—NOT average room air temperature (DTM Method). That means you get colder rooms without excessive run times or lower suction temperatures—and that makes perfect cents.

It's just one more way we make everyday life easier, more reliable, and more sustainable for you. We are EVAPCO—the team you can count on for life.

Ask your local EVAPCO representative how SST-B Series Evaporators can help you. Visit evapco.com to learn more.



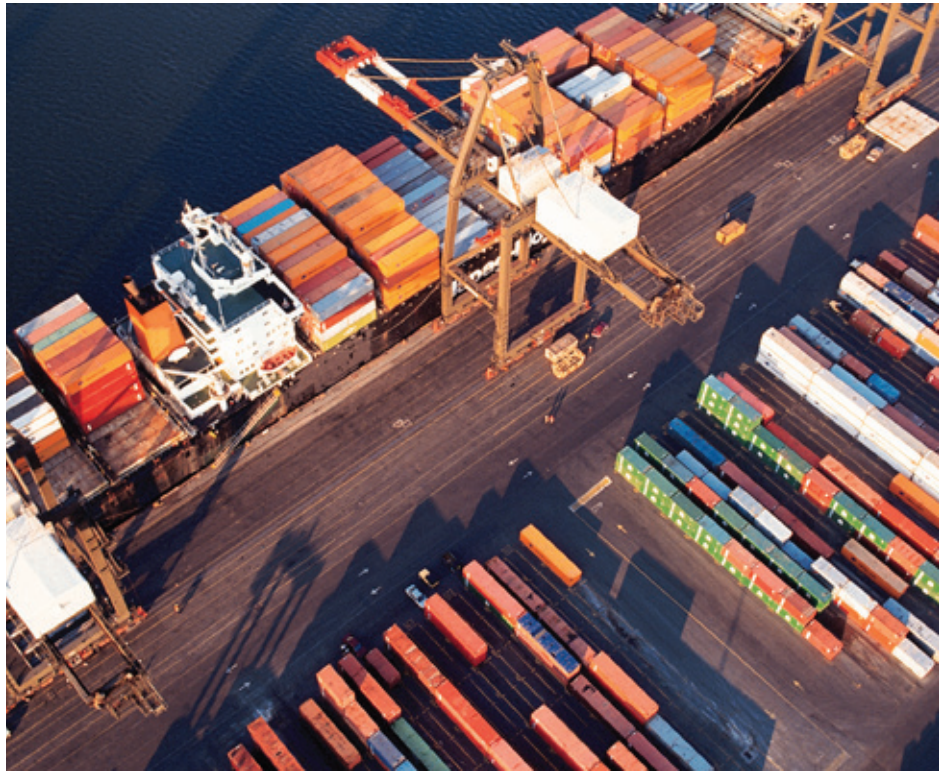
Since 1976
An Employee-Owned Company
Commercial HVAC | Process Cooling | Industrial Refrigeration | Power

The scale, weighbridge, lifting equipment or other devices used to verify the gross mass of the container must meet the applicable accuracy standards and requirements of the country in which the equipment is being used.

Method Two

The shipper, or a third party arranged by the shipper, can weigh all packages and cargo items, including the mass of pallets, dunnage and other packing and securing material to be packed in the container, and add the tare mass of the container to the sum of the single masses of the container's contents.

Weighing equipment must meet the applicable accuracy standards and requirements of the country in which the equipment is being used. The tare mass of the container must be visible on the exterior of the container. Estimation of weights is not permitted. In addition, the shipper cannot rely on the weights provided by someone else unless that weight is clearly and permanently marked on the surface of the goods.



New rules requiring that the weight of packed containers be verified before loading onto a ship take effect on July 1, 2016.

**DEGREES
BEYOND...**
szero.com

*Preferred Freezer Services
San Leandro, CA*

Industrial Refrigeration and Thermal Construction



Shippers choosing Method Two must comply with certification and approval requirements established by countries where the container is packed and sealed. It is important to note that the IMO considers Method Two inappropriate for bulk cargo such as unbagged grain or scrap metal that do not lend themselves to individual weighing.

Once shippers have established a verified weight, it must be documented. Shippers may communicate the verified gross mass in a shipping document, preferably in electronic form. This can be part of the shipping instructions to the carrier or in a separate document that indicates the verified gross weight. The weight certification must be signed by someone authorized by the shipper.

Because the contract of carriage is between the shipper and the shipping company, not between the shipper and the port terminal facility, the shipper may meet its obligation under the SOLAS regulations by submitting the verified gross mass to the shipping company. It is then the responsibility of the shipping company to provide information regarding the verified gross mass of the packed container to the terminal representative in advance of ship loading. Similarly, the shipper may also submit the verified gross mass to the port terminal facility representative upon delivery of the container to the port facility in advance of loading.

Carriers in receipt of a signed weight verification may rely on it to be accurate. However, if a carrier or terminal operator has reason to believe that the verified weight of the container provided by the shipper is significantly in error, they may take such steps as may be appropriate in the interest of safety to determine what the accurate weight is. Because the responsibility of providing a verified weight falls on the shipper, shippers may incur additional costs if more steps are taken to verify the container's weight.

Containers exceeding the maximum permitted weight, as specified in the IMO's Convention for Safe Containers, may not be loaded onto the ship. It is ultimately the ship's master who has the discretion to decide whether a container is loaded. A ship's master may decline to load a container if they have documentation it can be safely transported, regardless of the verified weight provided by the shipper.

In order to efficiently meet the new requirements, communications between shippers, carriers and terminals will be critical. GCCA members involved in the loading, shipping or transporting of marine containers are encouraged to review the new regulations and

communicate with relevant shippers, carriers and terminals to develop a common strategy for meeting the requirements.

For example, shippers and carriers should work together to establish timelines and processes by which the verified weight will be transmitted. Terminal operators and carriers should work together to establish processes for handling packed containers presented for loading that do not have a verified gross weight. Communication and preparation will be key to avoiding disruptions once the new

rules are in effect in July 2016.

GCCA will be closely monitoring this issue as the effective date approaches and will provide members with additional information about the implementation of the SOLAS Amendment as the process moves forward. @

LOWELL RANDEL is Vice President, Government and Legal Affairs at GCCA.
EMAIL: lrandel@gcca.org

GASGUARD-NH₃
Built food-industry tough

UNMATCHED PERFORMANCE IN THE HARSHTEST ENVIRONMENTS

CALIBRATION TECHNOLOGIES INC. SPECIALISTS IN GAS DETECTION
www.CTlengineering.com



DISASTER OR REDEMPTION

The mistakes and near misses of others can inform your own warehouse best practices.

The road to warehouse best practices can be messy at times — littered with good intentions gone wrong, narrowly averted disasters, a fatal moment of distraction or, sometimes, just plain bad luck.

Nobody wants to endure such situations, but there is always something to be learned from these experiences. When fully examined and analyzed, they can add to the body of knowledge and experience upon which warehouse operators build their best practices.

“It’s not just about learning from your own incidents, you can also learn a great deal from other operators’ experiences and this can be very beneficial in avoiding future customer claims,” says John Horvath, a warehouse legal expert and principal in the Chicago-based law firm of Horvath & Weaver, P.C., who provides IARW members with warehouse law articles, templates, and legal guidance.

“Claims most frequently result from incorrect temperature settings, theft, and improper shipment. The lessons learned from these incidents might be something that goes into an operations manual, a crisis management document or a training module so that the experience is there for those who want to look — and those documents should be looked at,” Horvath declares. “The takeaways from real life experiences, from documenting what went right and what went wrong, can be invaluable.”

Temperature Abuse

Horvath notes that an operations manual might address notifying a customer that

scallops were still in the reefer three days after they were received.

Horvath described an incident where scallops arrived at a warehouse on September 10 with a verbal request from the customer to place them in the cooler. On October 20, they were shipped to the customer, who in turn rejected the highly odorous shipment and filed a claim against the warehouse after the shipper denied telling the warehouse operator to put the scallops in the cooler.

“The lesson here is to put it in writing — everyone knows scallops won’t last in a cooler for a month, but if it’s not in writing, it didn’t happen,” Horvath advises. “Fortunately, the loss was covered by a limitation of liability in the warehouse policy.”

And how does an operator prevent a similar situation from happening? Horvath recommends sending a letter to customers once a year indicating that the warehouse

is responsible for reasonable care, and only liable if negligent. The operator can also suggest to the customer that they insure the product while it is in the warehouse. “Then when you say, for example, that you will pay the customer \$20,000 on a \$100,000 loss, the discussion goes a lot better,” Horvath points out.

Horvath cites an instance of 48 truckloads of pork bellies that were supposed to be blast frozen to minus 15 degrees as soon as they were received at the warehouse. The warehouse said the blast freeze would have to wait for two to three days, but in the meantime, the pork bellies would be kept in the freezer. The customer agreed.

As it turned out, records indicate some of the product was not blast frozen until five days later. The customer reviewed those records and filed a \$2 million claim. Lack of documentation was a problem, but the pork bellies were not frozen and the customer was able to get some value from them.

“The warehouse did not use the standard IARW contract and did not have the standard limitation of liability provision and so they had to cover the replacement cost of the goods,” Horvath says. “If you are signing one of these contracts, you need to check with your insurance broker to make sure you are covered.”

Horvath explains that the uniform commercial code allows warehouse operators to have reasonable limitations of liability. If the customer says they want a higher liability, operators should check with their insurance broker to see if it is covered, and the cost, and then go back to the customer and say it can be done for an additional cost.

“Don’t call it an insurance surcharge, call it an increased valuation surcharge,” Horvath suggests. “Make clear to the customer that it is only for warehouse coverage, not overall risk coverage. A lot of people don’t understand that legal liability insurance covers the warehouse but does not cover the goods. They are covered by the first party liability insurance that the customer buys.”

Horvath adds that under the Uniform Commercial Code, an operator can have a maximum liability limit, such as \$1 million, for any one occurrence. Most warehouse legal liability insurance policies have a \$25,000 or \$50,000 deductible, and the insurance company covers the rest.

In another case, Korean chestnuts were stored at too cold a temperature. The customer said the correct temperature was 30 degrees

Fahrenheit, the WFLO Commodity Storage Manual (CSM) indicated the range should be 32 to 34 degrees, but the product was actually stored between 25 and 27 degrees.

“Take advantage of a situation like this to advise the customer on proven best practices,” Horvath advises. “And if you are dealing with a new commodity, check the CSM. If the customer insists on storing the product at 30 degrees to extend shelf life, at least get a verbal agreement from them and

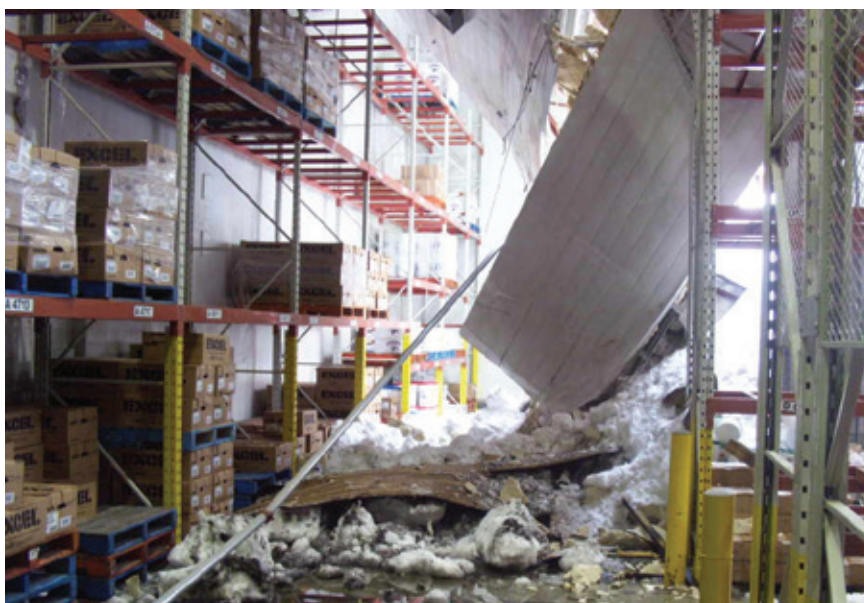
confirm it with an email.”

When a warehouse refrigeration system was being renovated, temperatures in the freezers rose to the low 30s. A janitor who went into the storage rooms every day and wrote down the temp from the wall thermometer recorded this, Horvath reports.

As the top three of the warehouse’s six floors had the temperature problem, the product from these floors was moved to other freezers. The warehouse admitted moving the



Maintaining an up-to-date list of emergency contacts and meeting with local fire departments, hospitals, and police can help ensure that response to emergency situations such as a roof or rack collapse can go more smoothly.



product, Horvath notes, but when asked for documentation, there was none.

“The takeaway from this incident is that you need to document everything and maintain good records,” Horvath says. “For ammonia leaks, you have to record parts per million on a regular basis. That tells you how much damage there might be.”

Horvath points out that if a warehouse operator is still recording temperatures by hand, they have to keep extremely careful records. “We are in the 21st century and automatic temperature recording devices are inexpensive and they are accurate. If a customer files a claim for temperature abuse, you have to have those records. Otherwise the presumption is that the damage was due to your negligence.”

Fanning the Flames

Mike Henningsen, Chairman and President of Henningsen Cold Storage Co., recalls how in 1991, one of his last classes at the WFLO Institute, before he graduated and took up his duties as a general manager, was in crisis management.

“In planning for potential disasters like fire, roof collapse or ammonia leak, one of the ‘to dos’ the instructor gave us was to ensure that our facility’s emergency call list of customers, workers, and emergency responders was up to date,” Henningsen remembers. “While it seemed like an obvious precaution, when I came back from the Institute one of the first things I did was check the facility’s emergency call list, and to my surprise, it was really out of date.”

Henningsen said that instead of filing his WFLO notebook away, he actually spent the week updating phone numbers and ensuring he had current emergency contacts. Then at the end of the week he went to the nearby city and met with the local fire department and discovered their list of contacts for the facility was also very outdated.

“Two days later there was a big fire at the facility,” says Henningsen. “But things went well that night because we had a good relationship with the fire department and had taken the proactive steps of meeting with them so they knew us, were familiar with our facility, and knew about our anhydrous ammonia.”

“Despite a very ugly crisis and a three-alarm

fire, we were able to work very well together and minimize damage to the building and avoid any damage to our customers’ product,” Henningsen points out. “To this day, I am so grateful I didn’t return from the Institute and just file my notes away without giving them a second thought.”

Henningsen says his takeaway from the incident was the importance of education and implementing what you learn, and not procrastinating. And of course, keeping all emergency information updated and maintaining a relationship with your local first responders.

“A crisis like that is inherently stressful and chaotic but if you extract the most basic elements from the equation and plan for them ahead of time, like keeping your emergency phone lists current, you will come out so much ahead of the game,” Henningsen adds.

Another lesson learned from that event was that even though in emergency drills employees dragged out large portable fans that would be used in a real event to clear out smoke or ammonia fumes, when they actually were ready to be put to use on the night of the fire, Henningsen realized they didn’t have the right outlets for the fan and an electrician had

The Proven Leader in Cold Storage Construction



MARTIN CONSTRUCTION
Integrity is our Foundation.



Martin Construction is a full-service Design/Build General Contractor ready to help you with new construction, addition and renovation projects throughout the East Coast.



- Planning
- Sealed Design
- Pre-Engineered
- Structural Steel
- Refrigeration
- Mechanicals
- Racking
- Sprinkler
- Lighting



Temple, PA (717) 336-2965 martinconstruction.net

Protecting you

Protecting your business



Protecting your future

Get the cold, hard facts.

Warehouse Legal Liability • Property and Casualty
Transportation

Your IARW service team:
Connie Phipps . Joe Howard . Paige Lowder
Call 816.960.9946 or visit www.lockton.com.





444 W. 47th Street, Suite 900, Kansas City, MO 64112 • 816.960.9000
WE LIVE SERVICE![®] Insurance • Risk Management • Employee Benefits
© 2009 Lockton, Inc. All rights reserved. Images © 2009 JupiterImages Corporation

to be called out in the middle of the night.

“When you do drills, don’t just go through the motions but find out where your weak spots are — it wasn’t until we were dealing with the real thing that we realized we needed to place these outlets in multiple places all around the facility,” he says.

Theft is Not a Best Practice

Although theft is a common calamity in the warehouse business, Horvath says documentation, as well as specific theft liability policies, can usually protect an operator from accountability.

For instance, Horvath recalls a warehouse whose customer arranged for the carrier and when the carrier arrived, the driver showed the release information to the warehouse workers on his iPhone. “It turns out to be a scam, the carrier disappears and the client files a claim against the operator for releasing their product to an imposter,” Horvath explains. “The warehouse countered that the carrier showed the release information but when the customer asked for a copy, the warehouse didn’t have it. This could all have been avoided if the warehouse had just asked the carrier to email the release information.”

Horvath points to a different outcome in a similar case — in that instance, a warehouse customer’s broker arranged for the outbound carrier who, as it turned out, was a crook. The crook had a legitimate carrier pick up the LTL load of frozen seafood, and then the crook redirected the carrier to transfer the load to a crooked carrier. However, this time the load was gone but the warehouse was protected because the load was released based on legitimate release documents.

Unfortunately, not all theft is an outside job as demonstrated by the Case of the Missing King Crab Legs — 905 cases received — 905 cases missing two days later as a result of employee theft.

Are warehouses liable for employee theft? Horvath says liability for the warehouse lays in the failure to employ best practices in hiring workers, such as neglecting to administer pre-employment background checks, and also not following best practices in supervising workers once they’re hired.

“Almost all warehouse liability insurance policies exclude employee theft,” admits Horvath but adds, “so you need an employee dishonesty liability policy.”

It Pays to Back Up

A few years back, the Mexican 3PL Bajo Cero Frigoríficos, experienced an electrical

discharge from the high voltage lines of its power plant during an electrical storm. Despite protective covers around the facility’s power converters, one of them was damaged and the cooling systems stopped working. To repair the power converter would take at least seven days.

The warehouse operators report that they were very lucky to find and install a similar power converter in less than 36 hours and thus were able to solve their problem and reestablish the cooling system.

“As a result of taking extreme measures to maintain the temperature, no stored product was damaged,” reports a member of the 3PL’s management team, “but those were 36 hours that I would never wish on any company.”

The team member explains that as a 3PL, you always think about backup plans in case the refrigeration equipment gets damaged, but you might not have a backup plan for a power outage that results in a long-term loss of the electric power and that also damages the stand-by generator.

DESIGNING & BUILDING FACILITIES FOR THE

NEXT GENERATION OF YOUR BUSINESS



LOOKING FORWARD TO SEEING YOU AT
THE 2016 IARW-WFLO CONVENTION

DEVELOPMENT
ARCHITECTURE + ENGINEERING
CAPITAL MARKETS
PRECONSTRUCTION
CONSTRUCTION
REAL ESTATE MANAGEMENT

BOB WEST | DIRECTOR OF BUSINESS DEVELOPMENT – INDUSTRIAL
bob.west@ryancompanies.com
904.237.3629

RYANCOMPANIES.COM



As a result of this incident, the team member recommends that you always have a backup installed and tested in the power plant for each one of the electric power converters in your plant.

Drunk on the Road

Henningsen recounts an incident when a truck driver arrived at one of his facilities to ship a load out for one of his customers. It didn't take long for some of the facility's employees to suspect that the truck driver was inebriated. They watched him for awhile and were able to stall him and contact the driver's dispatcher who sent someone else to take the load.

Henningsen believes the company's employees probably saved a life that night.

"This is an example of employees keeping ears and eyes wide open for the benefit of the public and the customer," Henningsen says. "We sometimes get stuck in our routine, picking product, putting it on the truck, finding the papers, and then the job is done. At our facilities, we train to go above and beyond — listen, look, smell — use all your senses, and if it doesn't seem right, take the initiative to do something."

Henningsen cites this as an example that



The presence of ammonia used in warehouse refrigeration systems makes it essential that warehouse managers meet with local emergency response officials to review how and where it is used so that any leak in the system can be addressed appropriately. (Photo courtesy of Sodus Cold Storage.)

should be in a warehouse policy manual. "You need good people that stay aware and alert and on top of their game every day, that use their best judgment and think outside of the box." ☞

ALEXANDRA WALSH is Vice President of Association Vision and a contributor to COLD FACTS.

EMAIL: awalsh@associationvision.com



United Insulated Structures Corp.

ARCHITECTURE • ENGINEERING • CONSTRUCTION

Cold Storage Specialists for 50 years!

UISC's staff of highly qualified, service oriented professional have delivered over 2,000 projects to our clients on time and within budget. Our objective remains: to serve our clients in managing every aspect of the project experience, innovation, and quality. Our unsurpassed dedication makes UISC an industry leader in turn-key construction projects. To ensure your ongoing success, trust UISC to manage your project from site selection and design straight through to completion.

Contact:

Larry Lantero, Jr.

or Rich Maleczka

708.544.8200

www.unitedinsulated.com



ENGINEERED FOR HIGH PERFORMANCE IN ALL CONDITIONS.

Raymond lift trucks deliver increased productivity and efficiency in cold storage applications. We replicate the harshest conditions to continually test and prove our systems work in extreme cycles of freezing and thawing. From -20° F to ambient dock areas, our trucks make the transition with minimal decline in performance.

Tackle the cold with our cold storage options to keep your truck and operator productive the whole shift through.



See how at raymondcorp.com/cold-storage

RAYMOND

RUN BETTER. MANAGE SMARTER.



GLOBAL COLD CHAIN
EXPO 2016 JUNE 20-22, 2016
VISIT US AT
BOOTH #1205

A REVAMPED IARW-WFLO CONVENTION

*Celebrating 125 years of cold chain excellence,
more keynotes and new educational formats.*

By Alexandra Walsh

The 125th IARW-WFLO Convention, convening at The Cosmopolitan in Las Vegas, Nevada, April 16-19, 2016, offers a variety of new and exciting educational, social and business development experiences.

Four keynote presenters will focus on business issues that are impacting members' organizations. The Focus Sessions on warehouse operations have been eliminated and in their place are Peer to Peer Executive Roundtables, Entrepreneur Encounters, and Cool Pioneers learning arenas, each designed for senior level executives seeking to understand, and find solutions to, key business challenges and opportunities.

The traditional convention expo component has moved to the Global Cold Chain Expo taking place in Chicago in June 2016, and will no longer be a feature of the convention. However, there will be plenty of high level business development and networking opportunities for buyers and suppliers to connect and build relationships – just in a different way than in past years.

Keynote Speakers



Robert E. Litan, Nonresident Senior Fellow in the Economic Studies Program – Brookings Institute, will present a keynote addressing *How Economists Have*

Changed the World for the Better.

A master storyteller with a keen sense of humor, Litan will take attendees on a fascinating journey that is completely different from typical economics speeches. Called one of the best economic writers ever – he is smart, accomplished and wonderfully entertaining.

Drawing on his acclaimed book, *Trillion Dollar Economists*, Litan explains how the

ideas of economists have changed, and are continuing to change businesses in ways that many, including entrepreneurs and executives, may not realize. He makes this case in a lively fashion, using examples from many different industries and sectors of the economy (even sports and on-line dating!).



Kevin (Kal) Kallaguer is the international award-winning editorial cartoonist for *The Economist* and the *Baltimore Sun*. In his keynote titled *Daggers Drawn*,

Kallaguer shares his unique take on current events, politics, and the economy. In lively and entertaining illustrated presentations, he utilizes his sharp wit and biting insight to tackle the issues of the day with well-placed humor and precision art.

Kallaguer has lectured at TED, Harvard, Pixar, and Google, and his commentaries have engaged, enraged, and entertained

readers and leaders around the globe.

In a distinguished – and syndicated – career that spans 36 years, his work has appeared in more than 100 publications worldwide, including *Le Monde*, the *International Herald Tribune*, the *New York Times*, *TIME*, *Newsweek*, *U.S. News and World Report*, and the *Washington Post*.

Kallaguer has garnered international honors and awards in seven countries and held exhibitions of his work in 12. He was a 2015 finalist for the Pulitzer Prize in editorial cartooning and won the 2015 Herblock Prize and the 2014 Grand Prix for Cartoon of the Year in Europe.



Juliet Funt is the CEO of WhiteSpace at Work, a training and consulting firm that helps organizations, their leaders and employees flip the norms of business in order

to reclaim their creativity, productivity and engagement. With thought-provoking content and immediately actionable tools, she has become a nationally recognized expert in coping with the “Age of Overload” in which so many of us live and work.

In her keynote, *WhiteSpace at Work*, Funt will help attendees learn the pivotal difference between activity and productivity. She will teach a streamlined method for personal process improvement – leading to more creativity and engagement. She helps executives, managers and teams answer the critical question “What thoughts deserve my full attention today?”

Funt’s mission is to show organizations how WhiteSpace® can change the negative patterns and behaviors that prevent them from achieving optimum results. Her clients include a number of Fortune 100 companies and span a wide array of industries, from financial services to technology, manufacturing to the military.

Check the GCCA website for information on the fourth keynote speaker, up-to-the-minute information on the conference and to register at www.gcca.org/125th-iarw-wflo-convention/.

Revamped Education Sessions

The 125th IARW-WFLO Convention will offer a very different and exciting educational experience than attendees have seen in past years. Gone are the Focus Sessions and in their place



Forerunners such as these 1940 members of the ARW North Atlantic Chapter helped lay the groundwork for today’s refrigerated warehouse industry.

attendees will be able to participate in Peer to Peer Executive Roundtables, Entrepreneur Encounters, and hear from Cool Pioneers.

The Education Committee is hard at work finishing up this year’s program. But below is a sneak peak at some of the offerings mentioned above.

Cool Pioneers

Within the cold chain industry, there are pioneers who are innovating in human capital development, cost-savings, and time-savings. The presenters for these sessions are IARW warehouse members who have made an impact on the industry through their innovations. Hear about their perspectives during “Cool Pioneers.”

- Talent (human capital development)
- Treasure (cost-savings)
- Time (time-savings)

E2 – Entrepreneur Encounter

Learn from some of the best and brightest entrepreneurs today who have grown companies and brands from the ground up. These leaders are wildly successful and will share their secrets to success and how they have transformed ideas and concepts into million dollar businesses.

Peer to Peer Executive Roundtables

Peer to Peer Executive Roundtables provide attendees a chance to share ideas, ask ques-

tions, and solve problems with their peers in a small group setting of 25 people per group.

A moderator will guide the participants through questions that have been submitted in advance on the subjects that matter most to executives in the cold chain industry.

Celebrating 125 Years of Excellence

This year’s conference is also an opportunity to recognize and honor that for 125 years, IARW has provided service to hundreds of members.

This story begins in 1891, when 16 men, five of whom represented refrigerated warehouses, met at the Grand Pacific Hotel in Chicago. At this very first conference, close to the beginning of the 20th century, the attendees recognized the importance of warehousing and determined to join together to form the first public warehouse group.

The American Warehousemen’s Association (AWA) was born.

Shortly after its conception, AWA initiated a Cold Storage Committee. Many years – and names – later, this would become the International Association of Refrigerated Warehouses.

With the outbreak of World War I, the United States was inundated with the need to provide vast quantities of food, mostly meat, to many of its allies. This prompted the construction of more refrigerated warehouses to meet the demand for storage.



A seminar sponsored by The Refrigeration Research Foundation (TRRF) - a forerunner of WFLO - was held at Hotel One Fifth Avenue in New York on February 1-2. We are trying to identify the year it was held, so if you know please call Cold Facts Editor Al Rickard at 703-402-9713.

By 1923, there were 5.8 million cubic meters of public storage in the country. In the same year, AWA published its first membership directory, listing a grand total of 97 cold storage firms.

The frozen food industry made great strides in 1928, when Clarence Birdseye of the General Foods Co. invented the double-belt freezer. In 1930, the company introduced the first U.S. frozen food department, freezing and selling foods such as meat, berries, and oysters, and changing the refrigerated warehouse industry forever.

By the end of World War II, U.S. public storage had expanded drastically during the course of the conflict to 44 million cubic feet of cold storage.

The IARW, realizing the need for greater focus on the science of refrigeration, established The Refrigeration Research Foundation (TRRF). This was later renamed the World Food Logistics Organization.

The 1950s was the decade of convenient frozen foods such as TV dinners and orange juice concentrate. For the first time, demand became greater than supply. By then, the AWA cold division had become the National Association of Refrigerated Warehouses (NARW), which became independent of the AWA in 1961. Three years

In 1991, IARW celebrated its 100th anniversary. Since then, IARW has opened international offices in India, China, Latin America and Europe. It has also restructured its relationship with the European Cold Storage and Logistics Association.

later, the group decided that every NARW member would also be a member of TRRF (WFLO). The Assembly of Committees began its annual gathering in 1965.

An increased focus on the international refrigerated food environment changed the name of the game in the 1970s, when NARW fittingly replaced “national” with “international,” creating the International Association of Refrigerated Warehouses.

In 1991, IARW celebrated its 100th anniversary. Since then, IARW has opened international offices in India, China, Latin America and Europe. It has also restructured its relationship with the European Cold Storage and Logistics Association.

Other milestones include the creation of a relationship with the Refrigerated Ware-

house and Transport Association of Australia Ltd, (RWTA) and the inclusion of greater geographical diversity in IARW membership and board representation.

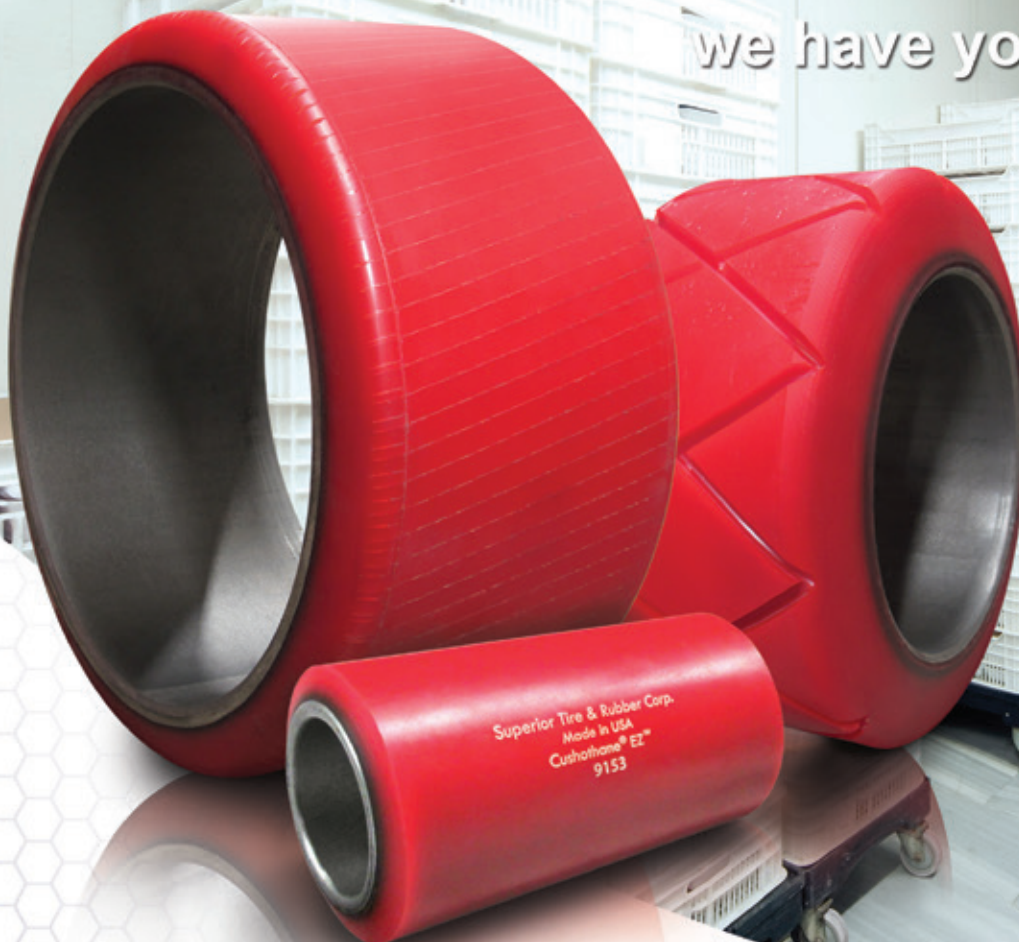
In 2007, IARW and WFLO joined with IACSC and IRTA to form the Global Cold Chain Alliance.

Today, GCCA has more than 1,300 members in 65 countries representing the refrigerated warehousing industry. ☺

ALEXANDRA WALSH is Vice President of Association Vision and a contributor to COLD FACTS.

EMAIL: awalsh@associationvision.com

When **COLD** temperatures or
Wet floors are an **ISSUE**,
we have you **COVERED**.



Cushothane® EZ™
The Cold or Wet Storage Specialist

In cold or wet applications, competitor compounds are chunking, tearing and losing traction. Cushothane® EZ™ is specifically designed with our highest chunk and tear resistance along with increased traction and grip, even in extreme cold temperatures of -10°F or less for ice cream and novelties.

Give us a call or visit www.SuperiorTire.com to find out if your truck falls into these usage applications.



Material Handling Application Specific Compounds



40 Scientific Rd., Warren, PA 16365
1.800.289.1456 www.SuperiorTire.com

©2016 Superior Tire & Rubber Corp. All Rights Reserved.



Produce being hauled off an unrefrigerated truck at the Mile 12 Market in Lagos, Nigeria, at the produce terminus. (Photo courtesy of GAIN NoSCA, LLC.)

SOCIAL RESPONSIBILITY CAN ADDRESS RECRUITMENT AND RETENTION WOES

Support of international causes attract and engage employees.

By Sheryl S. Jackson

More than 50 percent of millennials considered a company's involvement with socially responsible causes when deciding which job to take, according to the 2014 Millennial Impact Study produced by Achieve Guidance and the Case Foundation. More than 30 percent of survey respondents reported that involvement influenced them to apply and interview for a job at a specific company.

These statistics support other research and observations that the millennial generation – people born between 1980 and 2000 – are focused on social responsibility in how they

spend their time volunteering and how they spend their money in donations to causes.

Tapping into the interests and passions of these employees is one way the cold chain can

improve recruitment and retention of younger people who will be industry leaders in the future. As an industry that is dedicated to providing safe, fresh, healthy food across the world, organizations that comprise the cold chain are positioned to offer opportunities to serve a purpose that goes beyond a day-to-day job.

Although most companies easily manage participation in local community projects, offering employees an opportunity to support and participate in global initiatives is more difficult.

GCCA's partnership with the Global Alliance for Improved Nutrition (GAIN), an international organization that acts as a catalyst to build alliances of governments,

THE POSTHARVEST LOSS ALIANCE FOR NUTRITION (PLAN)

GAIN envisions a platform which will bring together the necessary expertise, technology, and finance to move progress forward on postharvest loss of nutritious and perishable foods.



business and communities to find and deliver solutions to the complex problem of malnutrition is one way members can show support for a global cause.

Although GCCA has been actively involved in international projects designed to enhance the accessibility of fresh food in developing countries, this is the first time GCCA is working with a partner to actually develop a multi-million dollar USAID-funded project – Postharvest Loss Alliance for Nutrition (PLAN), points out Amanda Brondy, Director of International Projects for GCCA. “We are working with GAIN to identify opportunities for our members to provide technical expertise to help organizations in Nigeria improve their operational processes to meet the needs of their communities,” she says. “We are lucky that GAIN is committed to understanding what is practical and realistic for our members, and we are able to offer input upfront.”

Support of the project is not financial, points out Brondy. “At this time, members have been asked for input on the project design and as we enter the second phase of the project, interested members will be asked to volunteer time,” she says. “We expect the second phase to be operational at the end of 2016.”



Peppers on display at a small retailer at the Mile 12 Market. The peppers sit in the hot sun with little to no shading. (Photo courtesy of GAIN NoSCA, LLC.)

The PLAN project will work with Nigerian organizations to identify medium-sized businesses that need assistance. “For example, if a Nigerian business is struggling to set up a cold storage business, this project can work with them to determine what skill sets are needed, and then facilitate a match so that a GCCA member can provide technical advice and guidance to that business,” explains Brondy. Although there will be some need for travel to Nigeria, to evaluate a warehouse or meet

directly with people operating the facility, there will also be times that a telephone or videoconference consultation is needed.

There are many benefits for GCCA members to participate in the project. “Smaller companies that do not have international facilities may have employees who are interested in working in an international setting, especially for a good cause,” says Brondy. “Although support of an international cause such as fighting malnutrition appeals to

millennials, there are also many long-time cold chain employees who want to share their decades of knowledge with others. This knowledge is extremely valuable as many of the companies will be operating in ways that will look very familiar to those who have seen the industry grow and change over the past 30 years.”

“I see the GAIN project as an opportunity for other cold chain companies to offer a junior executive who has only worked at one organization, or only worked in the United States, an opportunity to see how business is conducted in other environments,” says Matt Meredith, Managing Principal at Lixia Capsia, an investment and business advisory organization. “People learn by teaching others, so a company that supports a junior or mid-level employee’s participation as a consultant in this project is supporting a good cause and providing a professional development opportunity to the employee.”

Involvement in the GAIN project also provides a way to evaluate opportunities for business in new markets, points out Meredith. “Involvement in this project allows my company to learn more about the Nigerian market, support a great initiative and bring added value as we advise local businesses how to access investment dollars, structure programs and sustain success,” he says.

The international aspect of the project is also a benefit for GCCA members because it provides an opportunity to think globally, points out Ryan Silberman, Chief Revenue Officer at RefrigiWear Inc., a manufacturer of insulated industrial work wear, accessories and personal protective equipment for use in subzero temperatures. “Being involved in an international project enables a company to make connections that are essential if you want to grow your business by capturing imports or exports from other countries,” he explains. “The exposure to markets outside the United States positions you to handle new business.”

Silberman has also volunteered his time for the project for personal reasons as well. “I believe that supporting the project is good for GCCA. I believe that the global cold chain can positively impact people’s lives and the global economy,” he says. “Fortunately, the GAIN project gives everyone a chance to combine business, operational and social goals into this effort.”

TIPPMANN GROUP



REACHING ABOVE AND BEYOND YOUR EXPECTATIONS IN COLD STORAGE WAREHOUSING AND CONSTRUCTION

- Design/build construction
- Blast freezing with Interstate Warehousing’s QFR Zone® system
- Cold storage warehousing & distribution
- Specializing in construction of multi-temp food distribution and manufacturing facilities
- Customized distribution solutions at Interstate Warehousing
- Industry leader in warehouse automation assessment and integration
- Owner/Operators of more than 100 million cubic feet of frozen & refrigerated warehouse space

Visit us in Booth 1604 at:



Chicago, IL
June 21-22, 2016

(260) 490-3000



@TippmannGroup

9009 Coldwater Road • Fort Wayne, Indiana 46825 • www.tippmanngroup.com

SHERYL S. JACKSON is a freelance writer based in Alpharetta, Georgia, United States, who specializes in industry issues and trends.

EMAIL: sherylsjackson@bellsouth.net



Put the **freeze** on rising operational costs.

Costly top-ups. Downtime caused by deposits. Clogged filters. They can all hurt your bottom line. That's why choosing the right compressor fluid is so important. Petro-Canada's comprehensive line of REFLO™ A compressor fluids can save you money and reduce fluid consumption. Talk to a representative about our Tangible Savings Solutions and compare your current fluid choice with the REFLO product that is right for you. And put rising operational costs on ice.

lubricants.petro-canada.com

Petro-Canada is a Suncor business
™Trademark of Suncor Inc. Used under licence.



Beyond today's standards.™

FREEZING OUT FROST HEAVE

Finding solutions to this problem on the online forum demonstrates value of the GCCA Network.

By Sheryl S. Jackson

The concrete floor in a cold storage facility should outlast other parts of the facility, with the lifespan of most well-designed, well-maintained floors lasting 50 years or more. However, addressing the possibility of frost heave during the design phase is critical to a floor's long life.

How important, however, are vent pipes or underfloor heating systems in a tropical climate?

This question, posed by Juan Carlos Mejia M., a technical support and development manager for Dinpro Columbia, appeared in GCCA's construction and engineering forum – one of the online communities designed to connect members with each other to share ideas and offer advice. With the information provided by four other GCCA members, Mejia was able to develop an effective approach to minimizing the risk of frost heave.

The question:

Is it possible to have frost heaving under freezer rooms floors for projects located in tropical countries where temperature are always above freezing, and there is never any snow?

The freezer room temperature is equal to 10 degrees below zero Fahrenheit, and there is a six-inch layer of insulation under the floor, a four-foot layer of clean gravel under the

insulation, and the water table is a minimum of six feet from the insulation.

Mejia points out that “it is a common practice in tropical countries to use vent pipes to prevent frost heaving under freezer rooms.”

His concern is that condensation produced within the vent pipes as a result of outside air will later change to ice, which increases the risk of frost heaving.

The responses:

“Unless you want to defy the laws of physics and the kinetic molecular theory of gas, you should use under floor heat,” suggests Henry Bonar II, Chief Executive Officer of Bonar Engineering & Construction Company in Jacksonville, Florida. “Air gas molecules move at the speed of sound – about 750 mph – and the water vapor molecules move with them.” As air spaces reach 100 percent relative humidity, moisture will condense at any surface that is below the dew point and eventually, the temperature underneath the floor insulation will reach 32 degrees Fahrenheit, he adds.

“It may take 16 to 20 years for the floor to start to move,” says Bonar. “We had warehouses in California on ‘dry’ soil that took 15 years to start moving. Once they start to move, they move fast because it opens up air spaces.”

“Given my experience in freezer construction in all climates, Hank Bonar is 100 percent correct,” says Timothy Higgins, Jamison Door Company. “Remember that it also rains quite a bit in tropical climates, and rain drains from the surface and travels in the path of least resistance below the surface. This is often through the crushed stone beneath your freezer where it may freeze and accumulate over time, which leads to heaving. The cost of properly heating a freezer floor is much less costly than repairing the concrete freezer floor.”

“As far as I know, we have never built a building without underfloor heat simply because without an active heat supply on the underside of the insulation, which I know some people consider to be the earth, the cold gets through the insulation, even if it takes 15 to 20 years,” says Jake Stefan, President of ARCO Design/Build in Atlanta, Georgia. “Our clients have not wanted to take the risk because their projected operation of the buildings exceeded that time line.”

While Stefan has seen many buildings with air tubes put into operation in warm moist climates and buildings built on clean

sand with underfloor insulation in warm climates without any underfloor heat and no heave issues, he does know that poor maintenance of vents or heating systems can lead to problems. “The heave issues I have seen have all been related to poorly designed, installed or maintained underfloor heat systems — both electric and glycol,” he says. “Of course, it should go without saying, that most underfloor heat systems we have seen have been done properly and have not had problems. The point is that any system that is installed needs to be designed, installed and maintained correctly, just like any other mechanical system.”

Because there are soil, water table and other conditions unique to every site, John Scherer, Manager of Engineering, Los Angeles Cold Storage Company in California, recommends that all factors be evaluated very carefully in certain geographical areas. “When we provide assistance with freezer building designs, underfloor warming, because of the risk potential, is almost always advised,” he says.

“However, where you have non-capillary acting, dry soil conditions with low water tables, it has been proven through more than a hundred years of continuous operation at sub-zero Fahrenheit temperatures that freezer buildings can function very well without underfloor warming,” suggests



Floor freezing led to this buckled wall and cracked pilaster. (Photo courtesy of Bonar Engineering & Construction Co.)

Scherer. “We currently operate and help oversee operations of well beyond a million square feet of such refrigerated warehousing and food distribution capacity. As an extreme example, one facility operates several thousand square feet of 40-foot high, 80 degrees below zero Fahrenheit

temperature storage capacity with no underfloor warming or insulation whatsoever, and no measurable floor heaving has been detected.”

The resolution:

Following the advice and information provided to his question, Mejia wrote: “After reading your concepts, we are considering the use of a ventilation system using mechanically vented pipes under the floor slab and insulation. The PVC vent pipes will be about four to six inches in diameter, approximately 200 feet long, and joined to an eight-inch diameter distribution and collector pipe that is sloped one percent to collect and discharge any condensed water.”

He adds, “These vent pipes allow the interchange of temperatures under the floor insulation with external temperatures that are always above freezing. This will keep the cold from the freezer from advancing below the vent pipes, so frost heaving of the soil will be avoided.”



An example of floor heaving in Puerto Rico. (Photo courtesy of Bonar Engineering & Construction Co.)

SHERYL S. JACKSON is a freelance writer based in Alpharetta, Georgia, United States, who specializes in industry issues and trends.

EMAIL: sherylsjackson@bellsouth.net

PORT OF BALTIMORE OPEN TO THE COLD

Cold chain logistics operator shows Baltimore's reefer side.

By Karen E. Thuermer

The Port of Baltimore is top in its game in a number of commodities: automotive, roll-on/roll-off, containerized cargo, and forest trades. But that doesn't mean the port is not thriving in refrigerated cargo. It's just that the Maryland Port Administration (MPA) does not maintain dedicated cold storage operations or facilities on its terminals.

Refrigerated activity takes place at the port's largest terminal, Seagirt Marine Terminal, which is managed and operated by Ports America Chesapeake. Currently, Seagirt has 244 reefer plugs. Plans call for some 500 additional plugs in the near future, reports Mark Schmidt, General Manager for Ports America Chesapeake.

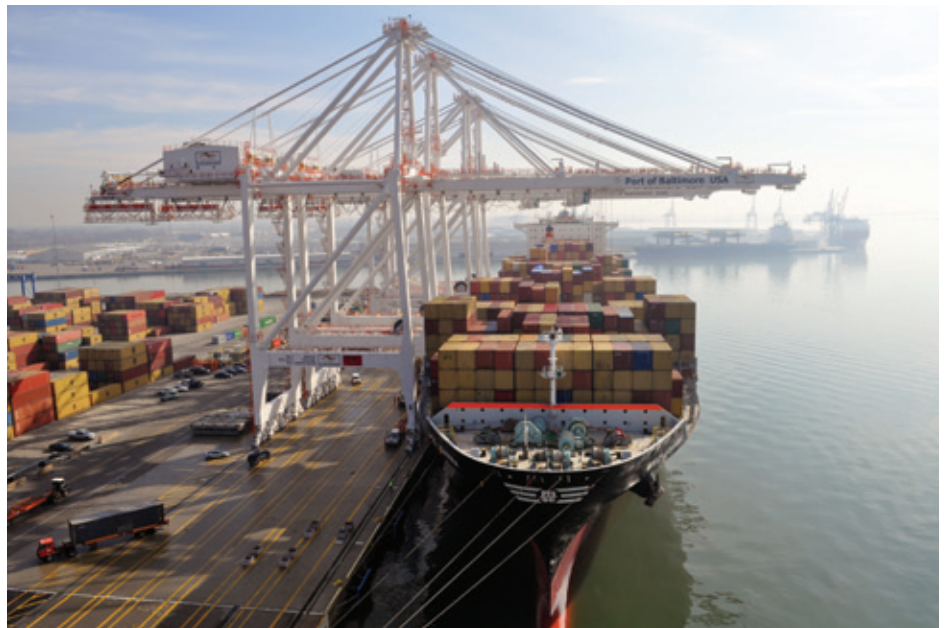
The independent stevedore and terminal operator of Seagirt, Ports America Chesapeake, LLC, has a unique public-private partnership with MPA. Several years ago it signed a 50-year lease to operate the terminal.

"Ports America Chesapeake has the highest berth productivity in North America. This means we move containers off the vessel quicker and make the product available to the supply chain sooner," emphasizes Schmidt.

Schmidt particularly stresses the great relationship Ports America Chesapeake and Seagirt Marine Terminal has with its cold storage customers. "We work closely with them to ensure we meet customer expectations," he says. "We work closely with MTC

Logistics and other customers on a daily basis to ensure cargo flows smoothly from our location to theirs."

Enter MTC Logistics, one of the oldest and largest temperature controlled logistics companies on the East Coast. MTC operates two cold storage facilities in the Baltimore area – one in Jessup with 5,162,000 cubic feet and 27 refrigerated dock doors; the other located immediately adjacent



The Port of Baltimore is one of only two Eastern United States ports with a 50-foot shipping channel and a 50-foot container berth, allowing it to accommodate some of the largest container ships in the world. Closer to the Midwest than any other East Coast port, the port is within an overnight drive of one-third of the nation's population. (Photo courtesy of Ports America Chesapeake.)



In 2015, MTC doubled the size of its Port of Baltimore distribution center at the Chesapeake Commerce Center adjacent to the Seagirt Marine Terminal, Baltimore's international container terminal, to facilitate 32,000 pallet positions of cold storage. The expansion accommodates growing demands for refrigerated cargo in the mid-Atlantic region. (Photo courtesy of MTC Logistics.)

to Seagirt, with 11,651,268 cubic feet and 32 refrigerated dock doors.

MTC also has a facility in Wilmington, Delaware, with 6,104,782 cubic feet and 31 refrigerated dock doors.

"The Port of Baltimore depends on us to service maritime needs with our near dock facility located immediately adjacent to Seagirt," comments Brooks Royster, MTC Logistics President.

The company markets itself as flexible, with the ability to provide less-than-truckload consolidation, full truckload management, port drayage, and import/export services.

Strategic Location

MTC Logistics opened its Baltimore facility in 2009 immediately adjacent to Seagirt Marine Terminal. "The idea was to support the port and our customers who use the port," Royster says.

In 2015, MTC doubled the size of that facility to 32,000 pallet positions of cold storage.

The facility handles both import and export refrigerated commodities. "On the import side, we do a lot of seafood, juice concentrates, and

pork. On the export side, we handle poultry and baked goods," Royster says.

Imports are predominately coming from China, followed by South America, and Eastern Europe. "On the export side, we handle poultry wherever poultry goes in the world, and it goes almost everywhere," he adds.

Paramount is the fact that the facility is secure and gated. "We are very conscience of the fact we handle international products," Royster comments. "Additionally, we have a unique situation where we can max load containers, either for export or import, all the way to the capacity of the container."

MTC Logistics has permits in place with the state of Maryland and city of Baltimore that allow MTC to take containers over-the-road, to and from the Baltimore facility, that are at capacity of the container. "We don't have any load limits restricting the loading of the container," he emphasizes.

This allows MTC customers to maximize ocean freight costing by putting more product into containers. "This is more than other ports are allowed to do — far more than the Port of Philadelphia," Royster comments.

In addition, USDA is on location at the MTC Baltimore location, meaning it can facilitate USDA inspections. "The US Department of Commerce also has an office here," he adds. And, the facility has blast freezing capabilities. MTC can blast freeze a truckload of poultry in 20 hours. "We can do upwards of 12 truckloads a day," he comments.

Good Cooperation

To drum up business, MTC and Ports America work closely in joint marketing efforts.

"We both attend industry specific trade shows and local events that support the Port of Baltimore," reports Schmidt. "We are jointly supportive of all level of government freight traffic initiatives."

Most important, MTC works closely with Ports America Chesapeake to ensure that containers get to and from the pier in a timely manner so that MTC can manage customers' cargoes and reduce — if not eliminate — demurrage and per diem.

"Because of the relationship we have with Ports America, we are able to get between five or eight containers per truck off the port,

which eliminates congestion,” Royster says. “That’s certainly better than New York’s two to three. “We have no congestion like Norfolk and New York. This has proven to be a real marketing tool for us.”

According to Royster, Ports America Chesapeake handled over 8,400 40-foot equivalent containers (FEUs). Last year, MTC handled a little over 3,600 FEUs. “And we are not at capacity,” Royster adds. “As the Port of Baltimore grows, we intend to grow. We have plenty of room for growth.”

Another advantage is Baltimore is 150 miles inland, thereby making it closer to market than Philadelphia or Norfolk.

“The Port of Baltimore is closer to Buffalo than the Ports of New York/New Jersey,” Royster remarks. “We are certainly closer to places like Chicago and Detroit. This means inland transportation costs are significantly lower.”

Best Practices

Royster emphasizes that one of the most important best practices is communication.



Cold chain imports – primarily seafood, juice concentrates, and pork -- are stacked for shipment via trucks leaving MTC’s distribution center in Baltimore. Shipments are imported through Baltimore’s Seagirt Terminal from all over the world. (Photo courtesy of MTC Logistics.)

“Minute-to-minute communication and contact between the terminal operator and cold storage is paramount,” he stresses.

Helping is web-based visibility through

MVision®, a propriety product owned by MTC Logistics. MVision® offers email event notification, EDI and inventory visibility over the Internet.

“This gives customers the ability to know real time, 24/7, where their product is,” Royster explains. “MVision® provides the ability to generate reports that are unique to customers’ needs.”

The product is central to MTC’s success. “While we have not grown in number of facilities or in available pallet positions, our modern state-of-the-art facilities and warehouse management system (WMS) has made us more efficient and able to handle more cargo through smaller facilities. This keeps our customers’ costs down and makes us more efficient,” he says.

Add to this the fact MTC is a family-owned business. “Our chairman is fifth generation. As a result, we understand our marketplace very well,” Royster says.

Royster also served as MPA Executive Director between 2005 and 2007, and has been Port Director and CEO of various marine terminals. Consequently, he interfaces well with the Port of Baltimore. ☺

PRIMUS



PLANNING • ARCHITECTURE/ENGINEERING • PROCESS DESIGN
 MATERIAL HANDLING • CONSTRUCTION MANAGEMENT
 770.928.7120 • www.primusbuilders.com

KAREN E. THUERMER is a freelance writer based in Alexandria, Virginia, who specializes in economic and logistics issues.

EMAIL: ktuermer@aol.com

CHECK THIS OUT

*A Hazard Assessment Checklist is important
to a company's well being*

By Keith Loria

Mitigating risk is an important component to any business, and a great way to protect employees, equipment and all vital parts of a company is to follow a structured analysis, checking off lists of possible hazards.

The GCCA Safety Committee is releasing the IARW Hazard Assessment Checklist, a tool designed for warehouse employees, as well as safety professionals, in the cold chain realm. The checklist assesses and identifies potential hazards by category of risk, and currently contains 26 checklists, which include sections on Dock Safety, Powered Industrial Trucks, Fire Protection, and Rack Safety.

Annamarie Gibbs, CSP, ASP, CRIS, Senior Vice President, Manager, Risk Control Services for Lockton Companies, notes warehouse facilities that have comprehensive safety programs and self-audit those programs regularly spend less on workers' compensation claims and are typically well-prepared for a surprise OSHA inspection.

"The checklist is designed to identify the hazard. Once the hazard has been identified, decisions must be made to reduce risk," Gibbs says. "The elimination of workplace hazards is always the ultimate goal; however, there are times when the hazard cannot be eliminated and the warehouse needs to make decisions on how to protect the worker from the hazard."

Sandra Jewett Bishop, President of Sodus Cold Storage Company, Inc., shares that being a small company, employees wear a lot of different hats and don't have the layer

of experts that many of the larger companies have.

"It's not like we have one person here who focuses on Process Safety Management and that's their whole job," she says. "They may need to do one thing today, something different tomorrow, and responsibilities can change between morning and afternoon."

For that reason, a Hazard Assessment

Checklist is a godsend to the company.

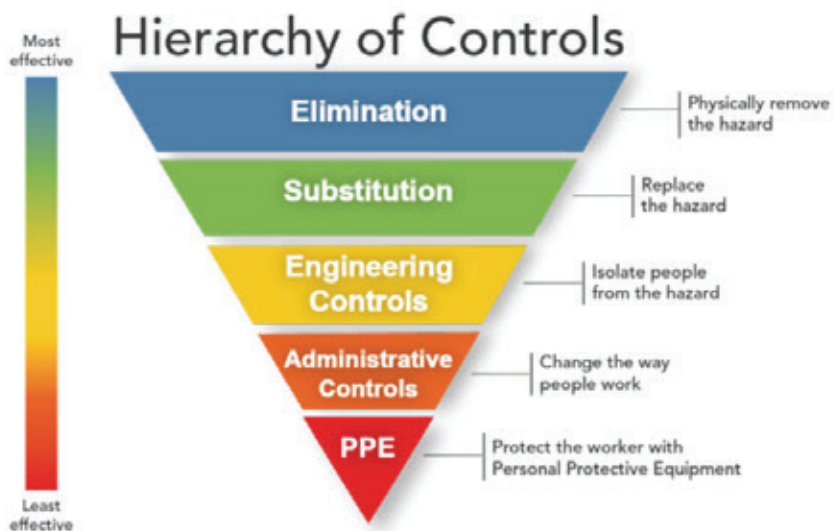
"When we need to do something as comprehensive as this checklist, what a relief," Bishop says. "Now we don't have to hire an outside expert to come in and try to learn our system and make sure we are doing it right. We do want to comply with regulations, but sometimes we miss something because we're not completely aware of it. This checklist keeps that from happening."

Using the Checklist Correctly

To properly utilize the checklist, Gibbs notes that employees must review any current inspection tools the company has implemented for comparison to the IARW Hazard Assessment Checklist.



Hazards that might cause an accident like this can be addressed by using the IARW Hazard Assessment Checklist.



The most common methods of controlling risk/exposures are depicted here.

“If your tool identifies hazards not listed in this checklist, add your information to the assessment tool. If the Hazard Assessment Checklist has items that are not in your tool, add to your tool,” she says.

Next, company leaders should identify the documentation system and schedule for routinely scheduled self-inspections.

“Get consensus on the tool or checklist to be used,” Gibbs says. “Identify and document an inspection schedule; provide training for members of the inspection team(s); determine how you will record findings; assign responsibility for hazard abatement and control method to be used; and track the identified hazards for timely correction.”

Bishop notes that the government doesn’t make it easy for a small company to figure out all the rules and regulations.

“When you’re going through something as complicated as office safety management, the government doesn’t have a list that you can just go to and easily understand what they want. You can go and read lots of very confusing gobbledygook, but you don’t know if your interpretation is the right one,” she says. “The checklist helps us understand the hazards that can be eliminated. It’s spelled out in layman’s terms and is very helpful.”

The Checklist in Action

Teresa Miller, who heads up safety and compli-

ance at Sodus Cold Storage, was given the task of implementing the checklist during the IARW Hazard Assessment Checklist’s trial period.

“I took the whole thing and went over it with my operations manager and maintenance manager. We answered every single question and I was very pleased at how many we were able to answer ‘yes’ to,” she says. “That was very encouraging to me, as someone who has never done compliance in my life. We were at least on the right track.”

In places where “no” was checked off, Miller made special note and understood the areas that the company needed to focus on going forward.

“We can be assured we are not missing anything. You don’t know what you don’t know. At least now we know if we are in the right area and whether what is already in place needs to be enhanced,” Miller says. “Now, we’re better equipped to fine-tune our safety program.”

Training Time

For a company to really prosper from the checklist, it must set training objectives and ensure that it is using it correctly. The objectives will vary depending on the level of safety expertise housed within your warehouse.

“Determine training methods such as problem solving exercises, lectures and videos and identify expectations at the end of the

training,” Gibbs says. “For example, at the end of the Hazard Assessment Checklist training, employees should understand the principles of risk assessment and be able to apply these to the working environment. They should also understand the economic cost of failure, warehouse damage, lost production etc., and see how positive management of health and safety can contribute to the positive image of public refrigerated warehouses.”

At the end, companies should identify standards and controls in their own area of responsibility to improve performance and evaluate the quality of the inspections performed and identify additional training needs.

Looking Ahead

The complete Hazard Assessment Checklist is expected to be ready in the next few months.

“We are currently populating the checklist with references for individuals that may seek additional information on a subject,” Gibbs says. “It is the hope of the IARW Safety Committee to complete a final review and release it to members the second quarter of 2016.” @

KEITH LORIA is a veteran freelance writer and contributor to *COLD FACTS*.

EMAIL: freelancekeith@gmail.com

MEMBER NEWS

NEWS FROM MEMBERS OF GCCA CORE PARTNERS

AGRI-NORCOLD purchased **BRING FRIGO** cold storage operations in Denmark, allowing the company to enter a new business area with service to the Danish grocery industry.



BELLINGHAM COLD STORAGE President and CEO Doug Thomas was recognized in a recent edition of *Bellingham Wins*. Read the interview at bellinghamwins.com/doug-thomas-2/.



DIGITAL LUMENS unveiled LightRules® Mobile, giving users a simple and convenient way to control and manage lighting settings from their mobile devices or tablets.

HIGHJUMP announced that the **ACCEL-LOSONE** warehouse management system now features expanded e-commerce functionality.



LANIER TECHNICAL COLLEGE announced it will bring its world-class Ammonia Refrigeration Training to Sampson Community College in Clinton, North Carolina. The partnership provides more ammonia training opportunities for the industrial refrigeration business community.



NEW ORLEANS COLD STORAGE completed its Port of Charleston expansion. The expansion increases the facility's blast capacity and storage space by more than 50 percent.

UNITED STATES COLD STORAGE completed the purchase of the warehouse and assets of CFC Logistics Inc., Quakertown, Pennsylvania, from Clemens Food Group.



VAPOR ARMOUR appointed Randy Bogrand to the position of Chief Operating Officer. ☞

What's lurking behind your doors?

Low cost solution for anywhere you need visual indication of gas concentrations. Protect your employees from walking into potentially dangerous environments.



Single channel gas monitor includes relay output with adjustable alarm setpoint, potted electronics, calibration mode with alarm inhibit and 4/20 mA re-transmitter to control panel or plant PLC.

GASGUARDIAN-EM Entrance Monitor

866-394-5861 www.CTEngineering.com sales@CTEngineering.com

CALIBRATION
TECHNOLOGIES
INC.

SPECIALISTS IN
GAS DETECTION

ASSOCIATION NEWS

NEWS ABOUT GCCA CORE PARTNERS

GCCA is pleased to announce Julie Hanson as its new European Director. Based in Brussels, Hanson is focusing on providing GCCA European members with valuable member benefits and a high level of customer service. She will focus on engaging with current and potential members, providing relevant and timely educational programming as well as building relationships to promote and market members and the industry. She has 11 years of experience in a full range of association management services and is a dynamic and creative professional.



Robert E. Litan, economic writer and Adjunct Senior Fellow at the Council on Foreign Relations, will be one of four keynoters headlining the 125th **IARW-WFLO** Convention, taking place April 16-19 in Las Vegas. Drawing on history in economics and his book *Trillion Dollar Economists*, Litan will explain how the ideas of economists have changed, and are continuing to change businesses in ways that many, including entrepreneurs and executives, may not realize. Don't miss Litan's keynote, "How Economists Have Changed the World for the Better," and the other educational offerings happening at this year's convention.



In a partnership between USDA and **WFLO**, Amanda Brondy, GCCA's Director of International Projects, led a team composed of Kent Sisson of SIAM Professionals, Martin Donnelly of AECOM, and Fabio Andrade of EUROFRIGO, B.V. to Angola to complete a cold chain assessment for the USDA's Emerging Markets Program. Historically, Angola has enjoyed one of the fastest growth rates in Africa, but falling oil prices have depressed the economy. The government is looking to diversify, and agriculture represents a strong area for growth. During the two weeks spent in-country, the team met with importers, exporters, logistics providers, port authorities, retailers, and government agencies, and toured facilities in and around the capital city of Luanda to assess the current cold chain challenges and opportunities with particular focus on poultry, pork and eggs. The team also identified training needs, which, with USDA approval will be planned for later this year.



Statistics show the number of natural disasters such as hurricanes, tornados, storm floods, as well as their intensity, are on the rise. Serious challenges arise for temperature-controlled facilities if a loss of power occurs due to these natural disasters. In 2015, the **IACSC-IARW**

Construction/Codes Committee released a white paper entitled, "Energy Back-up for Refrigerated Warehouses" to help warehouse operators prepare for outages with energy back-up solutions. The paper addresses the pros and cons of diesel versus gaseous generators and permanent versus portable generators. This member resource is available for download under Resources-Publications on gccca.org and is open to all employees of GCCA Core Partner companies



Dr. Patrick Brecht of PEB Commodities, Inc. and member of the WFLO Scientific Advisory Council, and Don Durm of PLM Trailer Leasing presented a session on the highly anticipated **IRTA** Guide to Refrigerated Transportation. The session took place during the Northwest Food & Beverage Manufacturers Expo & Conference, presented by the Northwest Food Processors Association. Both members of IRTA, Brecht and Durm addressed questions on how Food Safety Modernization Act compliance requirements will affect all responsible entities. They also spoke to sections that require further clarification to determine what needs to be identified to create the Best Practice procedure. ☎

NEW MEMBERS

NEW MEMBER COMPANIES OF GCCA CORE PARTNERS



IARW-WFLO WAREHOUSES

Elite Cold Storage

Carteret, New Jersey, United States

First Choice Freezer & Cold Storage

Vineland, New Jersey, United States

IARW ASSOCIATES

Bassich & Associates, Inc.

Carlsbad, California, United States

Carnot Refrigeration Inc.

Trois-Rivieres, Quebec, Canada

Flex Lighting Solutions

San Jose, California, United States



IACSC

Burch Corporation

Birmingham, Alabama, United States

Powered Aire Inc.

Greenville, Pennsylvania, United States ☎

SAC SOLUTIONS

With this issue, COLD FACTS introduces SAC Solutions, a column in which a cold chain question, submitted through the GCCA Inquiry Service to the team of experts on the WFLO Scientific Advisory Council (SAC), and the corresponding solution, are highlighted.

SAC is an eminent group of food scientists, logistics, and packaging experts from around the world. The council provides cutting-edge research and advice, from legal issues to food storage questions, to members of the Global Cold Chain Alliance and its Core Partners through the GCCA Inquiry Service.

To get instant advice from a private, online community of over 4,000 cold chain professionals, simply post your inquiry in the GCCA Online Community. All GCCA Members and their employees can access the GCCA Online Community. There are active forums for Construction & Engineering, Government Affairs, and Third Party Logistics.

If you're not a member, or are unsure how to post in the GCCA Online Community, contact the GCCA Inquiry Service. GCCA Members can also browse the full archive of inquiries and responses in the GCCA Inquiry Service Archive. Access to previous inquiries is restricted to members of GCCA core partner organizations.

Question: *I'm meeting with a customer this week and hoping you can provide an answer. The customer wants to know the time and cost to freeze bagels. Could you advise how I might find this information?*

Answer: Bagels, and similar bakery products, should be stored at 0 degrees Fahrenheit or lower with a high relative humidity level.

Quality losses can occur in frozen bakery products because when they are exposed to temperatures a bit above 10 degrees F, as they are not frozen anymore.

There are two sources of information that would be helpful to you in regards to similar questions in the future. The Commodity

- Dr. David Reid, University of California, Expertise: Basic Aspects of Freezing
- Kees Jan Roodbergen, University of Groningen, Expertise: Logistics and Operations Management
- Dr. Vicky Salin, Texas A&M University, Expertise: Agriculture Economics
- Dr. S. Paul Singh, Michigan State University, Expertise: Packaging, Package Labeling
- Dr. Donald Schaffner, Rutgers, The State University of New Jersey, Expertise: Microbiology
- Dr. Joseph Sebranek, Iowa State University, Expertise: Meat Products
- Dr. Charles White, Mississippi State University, Expertise: Dairy Products
- Dr. Elhadi Yahia, United Nations Food and Agriculture Organization, Cairo, Egypt, Expertise: Postharvest Technology of Perishable Foods

Storage Manual has a section on Bakery Products and the Food Freezing and Storage Calculator is the other resource. The calculator is on the GCCA website and provides access to hundreds of specific products.

Answer provided by Dr. Denny Heldman, The Ohio State University, WFLO SAC Member. @

WFLO SCIENTIFIC ADVISORY COUNCIL

Chairman and WFLO Scientific Advisor

Dr. Michael Jahncke, Virginia Seafood Agricultural Research & Extension Center, Expertise: Fish Products

WFLO Scientific Advisory Council

- Dr. Patrick Brecht, PEB Commodities, Expertise: Refrigerated Transportation
- Dr. Paul Dawson, Clemson University, Expertise: Poultry Products
- Dr. Donald Fenton, Kansas State University, Expertise: Refrigeration Engineering
- Dr. Dennis Heldman, The Ohio State University, Expertise: Food Process Engineering
- Dr. Faris Karim, Kansas State University, Ammonia Contamination and Food Toxicology
- Dr. Barbara Rasco, Phd JD, Washington State University, Expertise: Food Safety, Food Safety Regulations

2016 CALENDAR

MARCH 6-8, 2016
19th GCCA European Cold Chain Conference
Amsterdam, The Netherlands

APRIL 16-19, 2016
125th IARW-WFLO Convention
Las Vegas, Nevada, United States

JUNE 19-22, 2016
3rd WFLO Graduate Institute
Chicago, Illinois, United States

JUNE 20-22, 2016
GCCA – United Fresh Global Cold Chain Expo
Chicago, Illinois, United States

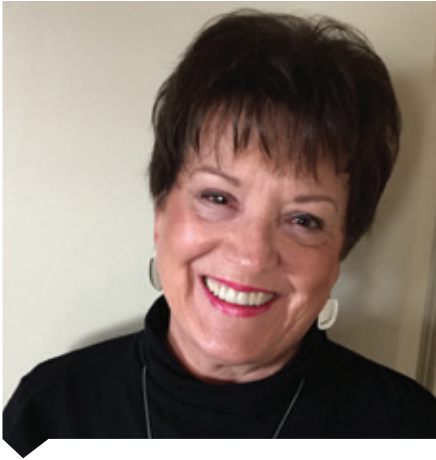
AUGUST 1-3, 2016
GCCA Assembly of Committees (AOC)
Washington, D.C., United States

NOVEMBER 10-12, 2016
36th IACSC Conference & Expo
Fort Lauderdale, FL, United States

*For more details go to www.gcca.org/events

COOL PEOPLE

PROFILING INFLUENTIAL PEOPLE CONNECTED TO THE COLD CHAIN INDUSTRY



CONNIE PHIPPS

Vice President/Account Executive
The Lockton Companies

After a 20 year partnership with GCCA and its members, Connie Phipps, with the Lockton Companies, has retired. After 36 years as an insurance professional, Phipps had gained broad recognition for her expertise in the warehouse legal liability coverage and exposure area as both an underwriter and broker.

At the Lockton Companies, Phipps gained national account experience through her work with not only IARW, but also Affiliated Foods, Associated Wholesale Grocers, and other refrigerated warehousing groups. Phipps was actively involved in the marketing and servicing of more than 350 locations of PRWs and their subsidiary companies. She worked with a dedicated team of associates in the food chain industry.

Since 1996, GCCA has partnered with The Lockton Companies to offer a complete and comprehensive line of insurance products for members. Members receive exclusive eligibility for warehouseman's legal liability, property and casualty insurance from The Lockton Companies. These policies are specifically designed by and for PRWs offering a superior program at a competitive price. Insurance and assistance can also be provided to IRTA and IACSC member companies.



Warehouse personnel are much more aware of the products being stored and the consequences that can result from mishandling, thanks to the education provided by WFLO.”

CF: (COLD FACTS) What are some of your best memories from the past 20 years partnering with the IARW and a total of 36 years in the industry.

CONNIE PHIPPS: My best memory is the time I have shared with the friends I have made in this industry. They have become part of my family that I will always cherish. If I shared any of my stories, they might not call me family any more.

CF: What is the most memorable warehouse visit you ever made?

CP: That would be a tour of Bellingham Cold Storage. A Russian ship was docked and being loaded with product. Joe Howard, myself and an underwriter were given the opportunity to board the ship. We were advised that we would be leaving United States soil and asked if we were comfortable doing that. Joe and I boarded the ship, the underwriter stayed on U.S. soil.

CF: What are the most significant changes you've seen in the industry that are reflected in insurance claims.

CP: Computers that controlled the refrigeration systems took up an entire 10 X 20 foot room if the refrigeration system actually had a computer system at all. These have been replaced by smart phones, ipads and laptops, which can control refrigeration issues from the warehouse or far away. Warehouse personnel are also much more aware of the products being stored and the consequences

that can result from mishandling, thanks to the education provided by WFLO.

CF: What will you miss most about working in the refrigerated warehousing world?

CP: Seeing so many wonderful people on a frequent basis and sharing friendships, meals and libations. I must admit that we do have a wine tour of the Finger Lakes already scheduled for October 2016.

CF: Are there any retirement plans you'd like to share with readers?

CP: I plan on staying in touch with the industry and hope to continue sharing my knowledge and experience on an as-needed basis. My husband Ed and I hope to continue traveling to various areas and getting together with the wonderful friends and family we have made over the last 20 plus years. ☺

JAMISON: INDEPENDENT THIRD-PARTY TEST LAB RESULTS

The HCR Door results are in: ***80% efficient*** in blocking air infiltration



The HCR calorimetric environmental test chamber at CTS Labs in Urbana, IL.

HCR pioneered the air door market 37 years ago and now has over 4000 worldwide installations. Until recently there was no authoritative, independent third-party test lab data that documented the efficiency of the unique HCR air door.

A three-month evaluation was recently completed, and those results are now available to the marketplace.

Creative Thermal Solutions (CTS) is a leading test lab for products in the HVAC and refrigeration industries. They test products that claim to offer increased energy efficiency, reduced energy consumption, and environmental sustainability. CTS labs recently conducted an extensive thermal performance analysis on HCR air doors. **The results verified that the HCR Model AC (Single Air Door) is 80% energy efficient* when stopping air infiltration and energy transfer between rooms with different temperatures.**

HCR Air Doors - Remove All Obstacles

HCR demonstrates the greatest energy efficiency for doorways with over 10% DOT (door-open time), and can represent considerable and even dramatic energy savings in the right application. In addition to energy savings, HCR significantly reduces moisture from entering the cold room, and prevents icing and condensation on floors, walls, and products. Reduced frosting of the refrigeration cooling coils will result in fewer defrost cycles.

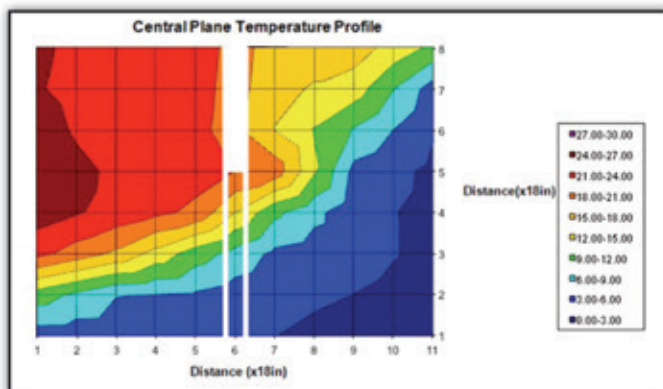
For more details about the CTS test results, visit www.hcrairdoors.com

JAMISON | HCR Air Doors

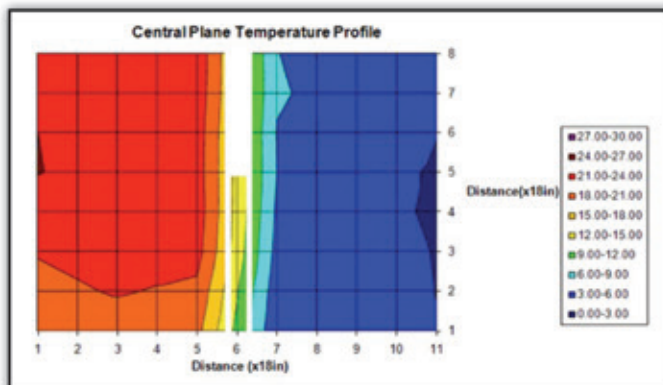
www.jamisondoor.com

800-326-7700

*For details and the lab performance report visit www.hcrairdoors.com, contact your Jamison or HCR representative, or call 800-326-7700. Request the White Paper on the Evaluation of Horizontal Recirculatory Air Curtain Efficiencies – Cooler to Conditioned Space, D. Rhyner, HCR, Inc.



Temp profile: air door off



Temp profile: air door on

FLOOR FACTS

- ① **FEWER JOINTS** = increase productivity as equipment travels faster
- ② **HARDENED FINISH** = improved appearance, durability, smoothness and ease of cleaning
- ③ **KALMAN FLOOR** = best buy in the industry for 99 years

KALMAN FLOORS HAVE UP TO 90% FEWER JOINTS



- Easy-to-clean
- Non-dusting
- Self-polishing
- Abrasion-resistant
- Longest warranty in the industry

Building Value for You



Ask us how we can help you get LEED points



KALMAN
FLOOR COMPANY, INC.

Kalman Floor Company has been building value for you since 1916.

I N D U S T R I A L F L O O R C O N T R A C T O R • W O R L D W I D E S E R V I C E

1202 Bergen Parkway, Suite 110
Evergreen, Colorado USA 80439

info@kalmanfloor.com

303-674-2290
www.kalmanfloor.com