Welcome to the second issue of Tech Talk for 2014. I trust that you will find this to be an interesting issue covering a diverse range of topics all based on the extensive experience of our technical adjusters. Please note that back issues of Tech Talk are available on our website http://crawfordgts.com under the tab “Media Center” then the button Read Tech Talk.

Earlier this year I was fortunate enough to attend the 3rd Annual National Cyber Liabilities Insurance ExecuSummit in Connecticut. The two-day event on cyber liability and data risk, emerging issues and trends for cyber liability insurance underwriting and claims intelligence in this increasingly important area of security and risk. Just a few of topics at the meeting included:

- Managing Cyber Security as a Business Risk: Cyber Insurance in the Digital Age
- The State of the Cyber Liabilities Marketplace
- Cyber Liability Underwriting, Coverage Issues
- Cyber Liability Claims Trends

These topics make our cover article The Future of Cyber Insurance all the more timely, as it presents a primarily European perspective on the need for and evolution of a rapidly developing liability area. Also in this issue we discuss the perils of transporting stone slabs in Russia; managing wine claims in Canada; adjusting for spare parts in factories; distinguishing between storm surge and wind damage, and investigating the validity of a breach of contract suit for a software firm. We trust that you will find these pieces to be both intriguing and of practical value.

Please feel free to contact me directly regarding any GTS-related issue at andries_willems@us.crawco.com.

Dr. Andries Willems is responsible for the global administration of GTS, including managing the global GTS strategy and plans; development and implementation of the GTS brand and value proposition, and management of the Global Large Loss Database. Willems started with Crawford South Africa in 1998 as a senior adjuster and has served in several senior operational, compliance, and project management roles in Africa, the U.K., and U.S.
In 2013, U.K. and Irish businesses alone sustained an average of more than 70 new cyber infections a day, putting them both in the top 10 countries exposed to persistent threat. The cost to organisations of data breaches is growing and most of the consequential losses currently remain uninsured. One of the key challenges in aiding the development of a viable cyber insurance market is finding the right approach to handling both first and third elements of complex cyber claims.

Cyber attacks at well-known institutions and our growing reliance on technology have captured the attention of risk managers together with the tightening of data protection legislation. Cyber liability is identified in third place as the emerging risk likely to have the biggest financial impact on global organisations over the next two years, according to one recent survey1.

Risk managers do not have to look far for examples of the impact a cyber attack can cause. Last year was the worst year to date for data breach with 740 million data files viewed or stolen around the world, according to Data Breach Today. The hacking of U.S. retail giants Target and Neiman Marcus compromised the personal information of over 100 million customers. And in February, Europe and the U.S. were hit by what is thought to be the largest-ever Denial of Service (DoS) attack directed at servers.

Beyond the immediate financial impact of recovering lost or damaged data, the cost of notifying customers and other stakeholders, the fines and penalties potentially levied by regulators and the lasting reputational harm a breach can cause mean that the $ value of a cyber attack is escalating. Take Sony PlayStation® in 2011; an estimated 77 million of its user accounts were exposed, and although they estimated the cost of the breach to be in the region of $170m, some analysts pegged the overall impact...
Crawford Global Technical Services® (GTS®) is focused on adjusting large and complex losses above USD $500,000. These losses can involve many types of commercial and industrial properties. In the field of industrial property insurance we encounter a variety of policies covering manufactured goods, their storage and transportation, as well as the manufacturing process. One area of manufacturing GTS® adjusters manage is claims related to property damage of production lines.

PRODUCTION LINES – THE HEART OF MANUFACTURING

Production lines are the heart of a manufacturing operation, designed to optimize delivery of products to market. They may be highly automated, or rely on skilled workers performing distinct operations on a product as it moves through the production process. The input of raw materials or pre-assembled components to the process increasingly relies on complex supply chains, and complexity tends to increase vulnerability.

This trend of increased complexity— including the development of just in time (“JIT”) supplies— have helped organizations reduce their working capital through the minimizations of stock on hand. They have also helped to reduce manufacturing cost by moving the supply and manufacture of components to lower-cost environments. But the removal of buffer stocks also increases the risk of disruption to the production process in the event of an incident; now even a minimal amount of down time can result in significant total supply chain interruption.

A well-known example of this situation occurred after the enormous Thailand floods of 2011, where flooding of numerous industrial parks resulted in disruptions to manufacturing supply chains that affected regional automobile production. The flooding also caused a global shortage of computer hard disk drives which lasted throughout the next year, and the limited product availability resulted in higher wholesale and retail prices for 2012.

When disruptive events— such as fires, floods, wind damage, earthquakes, explosions, etc.— occur at production facilities, GTS adjusters are always on the lookout for possible disruption to the manufacturing process that may in turn lead to a loss of output and ultimately a Business Interruption loss through the loss of sales of that output.

UNINTERRUPTED PRODUCTION OUTPUT

From a production perspective, buffer stocks of raw materials, components or finished goods may reduce the risk of a loss of sales due to an interruption of the production process. Production processes are frequently dependent on information technology (IT) infrastructure and there are usually service level agreements and maintenance contracts in place in an effort to guarantee a highly reliable up-time.

Where production lines are concerned, the up-time is mainly dependent on experienced technicians and mechanics in the on-site maintenance department and the availability of spare components on hand to respond to a breakdown. Unlike with IT systems, it can be difficult to quantify and guarantee response outcomes for production line interruption.

MAINTENANCE TO SUPPORT PRODUCTION

Historically, equipment maintenance has fallen into two categories: “Breakdown maintenance,” where a service specialist responds to a breakdown after a call for a repair and “Preventative maintenance,” where wear and tear and the life cycle of components are anticipated and monitored.
so that equipment repair and replacement are made before a failure occurs.

Whether in response to a breakdown or in an attempt to prevent one, a ready supply of essential spare parts must be catalogued and stored for efficient retrieval and use. These production line spare parts tie up capital, and a manufacturer needs to find a balance between the cost of holding stocks of spare parts against the estimated cost and likelihood of a disruption to production from an unforeseen breakdown. Deciding which investments are more likely to keep product flowing becomes a risk management issue.

This spare part management becomes more difficult when the machinery is aged or where rapid innovation is taking place, meaning some parts become hard to obtain or stocks of expensive spare parts become obsolete. The appropriate balance of investment in spare parts is not easy to achieve.

LARGE SPARE PART STOCKS

The need for high up-time for production lines may lead to management deciding to secure large stocks of spare parts to cover expected parts wear and failure. To avoid the risk of damage or loss of these spare parts they may be carefully warehoused, quite often at another location adjacent to the production site to try and ensure security of supply.

SPARE PART STOCK AND FACILITY DAMAGE

A manufacturer may be experienced and adept at managing the risks of anticipated production stoppage, but when a peril such as a considerable fire or flood damages the production plant, this crisis situation brings new issues to consider and decisions to be made. Extensive damage to the production line brings up the critical question of whether repair is feasible. The company’s technical-mechanical support team may be prepared to offer its spare part stock for a repair effort, but detailed examination of the site and equipment may reveal damage to critical frame structures supporting much of the production line, and that these structures cannot be acquired anymore in the market.

In this example, the consequence of the frame damage is that the machinery is considered a technical total loss. It may also be that repair is still feasible, but that the repair time is far in excess of the delivery time of new equipment, as special parts still have to be custom manufactured. In the latter case the decision could be made that the machinery is repairable, but the Business Interruption would be unacceptably exacerbated by the time required to create replacement parts—meaning repair is not economically feasible. In these situations the manufacturer is probably facing a total equipment loss requiring full replacement instead of repair.

Thorough financial and time analysis, along with thoughtful decision-making, may have resolved the core outcome of the catastrophic event, but there are additional elements of the situation that the manufacturer, adjuster, and insurer still need to manage.

One of the elements requiring decisions is the spare parts in stock. These parts may not have been damaged by the fire or flood, but may have become obsolete by the decision to replace the damaged machinery. The financial impact of the useless parts is generally presented as a part of the claim, but the lack of physical damage to these spare parts brings complexity to the decision on policy coverage.

When production machinery is new and initially delivered it may be accompanied by standard sets of exchange components for modification or a first set of repair parts for normal maintenance; these pieces may be used in the first years of operation and have no special value or pricing.

However, when this machinery CONTINUED ON PAGE 13

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Figure 1. Supply chain vulnerability indices (SCVIs) for different industries.1
Wine Claims

By Randy Corsini BA, CIP, CFEI, CCFI-C, Senior General Adjuster Crawford Canada Inc.,
Global Technical Services

The Niagara region on the northeast U.S.-Canada border is home to more than 80 wineries. Twenty years ago there was less than a third of that number. Thanks to local and international efforts—including enhanced growing techniques, a focus on a range of grape varieties appropriate for the soil and climate, as well as education on traditional and modern winemaking techniques—the Niagara region is now recognized throughout the world as a first-class area for wine products developed through increasingly sophisticated production methods.

The area is home to Brock University’s Cool Climate Oenology and Viticulture Institute, which is an internationally recognized research institute dealing with cool climate viticulture, oenology, wine business and wine culture. The Institute also trains many of Ontario’s winemakers and viticulturists through its various degree programs. Also in the area is the Niagara College Teaching Winery, which is the first of its kind in Canada. Both of these organizations have contributed to the Niagara area’s development of modern winemaking methods.

As with any industry, insurance claims do arise with wineries. Following is a brief overview on managing wine claims. The topic is summarized under these headings:

- History of Wine
- What is Wine
- How Wine is made
- Types of Claims
- Insurance Coverage
- Summary

HISTORY

The production of wine dates back thousands of years; as far back as 7,000 before the Common Era. For many years, wine was considered a drink of the elite ruling classes.

The impetus for wine production was not just its flavor and effects such as intoxication; there were health considerations as well. During much of human history there was neither the awareness of the need for nor the ability to produce clean, bacteria-free drinking water that would help prevent disease occurrence and transmission.

Wine was produced as a substitute for water, as the fermentation process involved in wine killed the harmful bacteria found in natural water supplies.
**WHAT IS WINE?**

Wine is an alcoholic beverage made from fermented grapes or other fruits. The main ingredient is ethanol—commonly known as alcohol. The natural chemical balance of grapes allows them to naturally ferment and make a high quality beverage without the addition of sugars, acids, enzymes or water.

It is yeast—a microscopic fungus—that consumes the sugars in the grapes and converts them into alcohol and carbon dioxide. Different varieties of grapes and strains of yeast produce different types of wine. Fermentation is basically a complex chemical reaction that is capable of being carefully controlled to produce many different styles of wine and other alcoholic beverages.

Because of the very nature of the product itself (vineyards are subject to weather patterns, alcohol is flammable, and beverages can spoil), wine’s production complexity and the machinery used to harvest, crush and ferment wine, a number of types of claims can arise from natural, accidental, or negligent causes.

**HOW WINE IS MADE – A SIMPLIFIED DESCRIPTION**

Wine begins with grapes on the vine, which are harvested under the direction of the winemaker. The winemaker ultimately is responsible for all aspects of wine making, from harvesting to bottling and monitors the process through all of its stages.

Larger wineries will also have a viticulturist, who specializes in the science of grapevines, managing the vineyard, pruning, irrigation and pest control. Depending on the type of grape and the type of wine being produced, harvesting can be done by hand or by machine, or a combination of both.

Depending on the winery, the grapes may then also be sorted for quality. The grapes then go into a machine—a destemmer—that removes the stems, and they are then transferred into a fermentation vessel.

Red wines are fermented with the skins on to extract colour and flavor from them, while white wines are pressed to separate the juice from skins before fermentation. Commercial yeast is then typically added, although some wineries will use wild yeast, naturally present in the vineyard or winery.

During fermentation carbon dioxide is released as chemical by-product. After or toward the end of alcoholic fermentation, red wine and sometimes Chardonnay wine are moved to oak barrels to age and complete the maturation and flavoring process.

Not all wine goes into barrels; most white wines, for instance, complete their fermentation in large stainless steel tanks that have no affect on the wine’s flavor.

After a period of time of storage (which, depending on the vintage and style, is usually three to 24 months), the wine is bottled. Before bottling and during the maturation of the wine, it is monitored carefully for quality, and minute amounts of chemical additions such as sulphur dioxide are often used to help protect against spoilage. Also various fining agents are used to help clarify the wine and maintain quality.

Bottling involves pumping the wine out of the tank and putting it through a series of filters of varying sizes. It is then bottled—either at the winery or occasionally offsite—capped (normally with a natural or synthetic cork or a screwcap), labelled and stored.

To make sparkling wine the wine is bottled and then lightly corked. Some additional yeast...
Crawford Global Technical Services® (GTS®) was retained to adjust a Professional Indemnity (PI) claim of a mid-size software manufacturer. The software company was contracted for a custom project—to deliver special application software to an international telecommunications operator. The project was based on a requirement to provide “state-of-the-art” technology to the application, which would have provided the buyer with expanded capabilities in its operations.

Delays lead to the project deadlines in the agreement between the two parties being missed, with the result being that the telecommunications operator was going to hold the software company liable for approximately $1 million dollars in alleged damages. This potential liability threat was large enough to trigger a compulsory notification under the PI insurance policy cover.

GTS was appointed to investigate and consider the alleged liability, as well as the circumstances that led to the project not being completed as contracted. The GTS loss adjuster involved was very familiar with these kinds of claims, and as he began his investigation noticed the delays resulting from a continuing stream of new potential features and functions, which are common when the contract allows for a broad interpretation of the project parameters. Generally a highly specific contract and strict project management should manage this contract scope creep, but when those controls are not in place new features are continually requested, resulting in delays as the software is readjusted to compensate for the ongoing change requests.

GTS’ review revealed that the two contesting parties had been discussing the proposed 26th revision to the technical specifications of the initial agreement, and this large number of revisions prompted a detailed analysis of the original project and subsequent scope changes. Project analysis—and associated documentation of the variety of requests for changes which the software company received from the telecommunications provider—demonstrated that the buyer was unable to decide on a precise set of features for the application. Potentially there was a wide range of new functionality for the software that could put the telecommunications provider ahead of its competitors and at the leading edge of the market, and the result was that the telecommunications provider was regularly expanding and changing what it wanted from the application.

GTS’ view was that the software company was acting in good faith by responding to its client’s changing requests, and it would be difficult to legitimately argue that its response could be viewed as a negligent act under the policy. Additionally, the buyer was benefiting from a flaw in the contract stating that extra time (which had to be paid for) and delays resulting from change orders were only acceptable once the technical specification was agreed, but the change orders meant that the technical specification had to be modified as well. This meant that the planned number of hours to realize the technical specifications was far too little and generated major frustration in the software company’s project team. The contract also included a clause requiring “state-of-the-art” software, an ambiguous description that created enormous project creep. Given the buyer’s actions and the deeply flawed contract language it could be argued that the inability to meet the completion deadline was not materially negligible.

The analysis by the GTS adjuster disclosed a number of mitigating factors affecting the project’s viability, including the poorly constructed contractual requirements and specific actions taken by the telecommunications company that could materially weaken its claims argument. Based on the evidence and arguments put forward by GTS, the claimant (telecommunications operator) ultimately was convinced to reconsider the viability of its claim. After additional discussions and negotiations between the parties, it was determined that the telecommunications provider would pay approximately 80% of its outstanding debt to the software firm and withdraw its claim for damages. The resolution of the situation also lead to more specific and rigorous development of proper contracts by both companies, and the software firm created a set of rigid project steps to guide its operational processes. The management of the software company and its PI insurers were appreciative of Crawford GTS’ strategic approach and solution it engineered.

Mark Vos, an executive general adjuster, is responsible for Crawford’s GTS loss adjusting in continental Europe, the Middle East and Africa. He has more than 35 years of experience as an adjuster, operations manager and executive and focuses on losses in the agriculture, engineering, power and energy and technology industries. Contact him at markvos@crawco.nl.
Crawford GTS® has redesigned its website (http://www.crawfordgts.com/), enhancing its accessibility and usability on mobile devices. Now you can access the completely revised GTS website from all common browsers and on most modern mobile devices including iPads® and iPhones®. The Crawford GTS mobile website won a 2013 MobileWebAward from the Web Marketing Association.

The enhanced user experience provides more visuals, easier navigation, and robust search and mapping tools. Through the use of responsive design, this site automatically optimizes the layout and design to fit any screen from desktop to tablet to mobile phone. This new mobile-friendly website replaces the previous GTS mobile application, providing greater functionality without the need to download an application. The new mobile website provides all the same great search functions of the previous mobile application, plus it is:

- Instantly available from your browser—no download required
- Compatible on most mobile devices
- Can be upgraded instantly
- Is easier to find and share with other users

The Crawford GTS Website offers enhanced usability and access for office and mobile users.

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Review Tech Talk, our magazine on global technical adjusting

See our location directory today!
Transporting and Securing Stone Slabs

By Anatoly Shmelev, Deputy Director and Senior Expert, LLC “Russurvey”

“Everything that happens once can never happen again. But everything that happens twice will surely happen a third time.”

— Paulo Coelho, The Alchemist

We advise our clients that the recurrent unsafe commercial transportation in the Russian Federation indicates pervasive logistics faults, and that consequently a cargo accident should not be considered as an insured event because damage to the cargo and other consequences are inevitable. The most frequent cargo types that we encounter in our work are equipment, metal and concrete.

One more cargo type regularly sustaining damages during the transportation is natural stone. The transportation of such cargo is always perilous—stone is dense, heavy and brittle—and accidents involving stone are spectacular and significant. Vehicles carrying stone usually become severely deformed if a mishap occurs. Cargo often falls out of the vehicle creating significant road dangers. The great hazard the unsafe transportation of such cargo poses to people’s life and health is clearly seen in the related photographs (Figures 1-8, below) taken in the Russian city of Pskov.

In this article we will consider natural stone plates, or, as it is often referred to in stone milling, slabs. The slabs are rectangular, sliced plates of relatively thin marble, granite, onyx, shale, or other decorative stone typically used for flooring and wall tiles, kitchen work surfaces or set into furniture. The dimensions of these slabs and details of cargo sizes and accidents are usually as follows:

- Length 2500 – 3000 mm
- Width 1500 – 800 mm
- Thickness 20 – 30 mm
- Gross weight of the cargo is usually 20,000 – 21,000 kg
- Standard consignment consists of two cargo units 10,000 – 11,000 kg each
- Country of origin: Italy or Greece
- Accident site: Commonwealth of Independent States

Looking at the multiple photographs just from the work of Russurvey Ltd, one can only guess how many similar accidents occur before the cargo would cross the Commonwealth of Independent States (CIS) border. Given the fact that road conditions in CIS differ from those in the European Economic Community (which has stricter, and more strictly enforced, regulations on road construction and maintenance); the accidents shown in the photographs are highly likely to occur on a regular basis.

In examining the number of natural stone cargo accidents, it’s essential to try to determine the causes of the accidents and how the liability is assigned. First we must consider how cargo is packed. The Internet gives the following definition for “packing”:

“Packing is a full range of protection measures and material resources applied to prepare the cargo for transporting and storing, and to ensure its safety. The party, responsible for packing is the shipper/seller.”

Ideally, preparations for transporting stone slabs include some very specific physical arrangements and organization.
in the cargo vehicle. At the moment of loading, an aggregated cargo transport unit should be formed inside a trailer, creating an “A”-shaped frame that allows the slabs to be efficiently consolidated—stacked vertically at an angle. The dimensions given below as an example were taken from one of our reports. Every transportation case is different, but the result of incorrect packing is consistent.

CARGO TRANSPORT CARGO STORAGE UNITS

Following is a common slab storage situation; it highlights problems that can result from improper securing. The cargo transport unit of natural stone slabs is formed on two “A”-shaped frames, provided by a shipper (Figures 9-12, right). On “A”-frames the slabs can be transported on butt ends.

- The height of the frame from the floor to the upper lath is 1500 mm
- The length of the frame along the lower lath is 2000 mm
- The lower lath is made of steel “Г” - shaped profile, 6 mm thick
- The vertical component “A” is made of steel “Г”-shaped profile, 5,5 mm thick
- The intermediate reinforcing distance rod is made of steel “Г”-shaped profile 20 x10mm

Shown in Figure 13 is the packing frame showing the slabs being loaded, and Figure 14 is diagram illustrating the loaded slabs while Figure 15 shows the slabs loaded.

TIGHTENING OF THE TRANSPORT PACKAGE

After the slabs were placed onto the frames, they were tightened with two sections of short-link chains around the entire package and jacketed with turnbuckle screws (Figures 16-18). Cardboard linings were put under the chains in the areas where the chains contacted the marble slabs.

Physical dimensions of the restraining chain:

- Caliber: 7 mm
- Length/width: 51/31 mm

Physical dimensions of turnbuckle screw:

- Diameter: 16 mm

In the course of inspecting the damaged cargo vehicle it was revealed that the rear A-frame in the intact cargo unit had shifted. The frame was inclined with its left leg pointing forward. The asymmetrical distance between the frames’ legs inside the packing was... | CONTINUED ON PAGE 16
Global Technical Services Representatives Speak at UW–Madison

Mike Minasian, executive general adjuster, and Adam Eggleston, national general adjuster, of Crawford Global Technical Services® spoke earlier this spring at the University of Wisconsin–Madison to students pursuing a program of study in actuarial sciences.

As part of a promotion by insurer Swiss Re targeting younger students and graduates in an attempt to increase awareness and get them further involved in the insurance industry, the GTS® representatives presented on property claims, claims processes and the claim side of the insurance industry.

Keeping up with Cyber Liability

This spring GTS leader Andries Willemsen caught up on key cyber liability issues when he attended the 3rd Annual National Cyber Liabilities Insurance ExecuSummit in Connecticut.

The two-day educational conference focused on cyber liability and data risk, emerging issues and trends for cyber liability insurance underwriting and claims intelligence in this increasingly important area of security and risk.


Conference speakers included Dr. Larry Ponemon, chairman and founder of the Ponemon Institute, a research “think tank” dedicated to advancing privacy and data protection practices. He is considered a pioneer in privacy auditing and the Responsible Information Management or RIM framework. Topics covered at the meeting included:

- Managing Cyber Security as a Business Risk: Cyber Insurance in the Digital Age
- The State of the Cyber Liabilities Marketplace
- Cyber Liability Underwriting, Coverage Issues
- Cyber Liability Claims Trends
- Hot Data Breach Litigation Issues
- Verizon’s 2013 Data Breach Investigations Report
- Cyber Liability & Cloud Computing
- International Vulnerability Purchase Program: Why Buying All Vulnerabilities At Above Black Market Prices Is Economically Sound
- Global Cyber Liability - International Exposures
- Top Cyber Issues in 2014

GTS’ Promotes Sophy and Cullen in the U.S. Western Region

Crawford & Company announced the promotions of Cullen Sophy and Jon Egurrola, both based in the Crawford Global Technical Services® (GTS®) unit. Sophy’s new role will be as vice president, managing director Western Region, while Egurrola has accepted the newly created position of director of operations.

Sophy will be responsible for the Western Region of the United States and will focus his efforts in recruiting, building a strong team as well as developing and growing new and existing lines of business. For his new position he will relocate to California from Portland, Oregon, and work out of the Los Angeles GTS office. Sophy’s diverse background brings related experience from field operations as well as experience working with clients as a risk manager and also carrier experience as a loss leader at a major insurer. He has been with GTS for five years.

Egurrola will serve as director of operations and hold a dual role as team manager in the West. As director of operations he will apply his experience in management and finance to assist GTS managing directors with their financial profitability. Egurrola has more
than 20 years of experience with Crawford GTS® on the West Coast.

“We are excited to have Cullen increase his responsibilities with GTS and have Jon join our new leadership group in the West,” said Rich Lafayette, GTS U.S. leader, chief technical officer and managing director in its SE region. “This new formation brings together a strong and united team to handle large and complex losses in this important region and enhance our service to our clients.”

### Spare Parts

When evaluating a manufacturing facility, spare parts need to be on the long list of items—facility structures, electrical and water systems, manufacturing equipment, product and materials stores, etc.—requiring review, analysis and claim determinations. Research will be needed to determine the original purchase price of parts and current market values for comparison. It will also be essential to determine if parts are viable for salvage to offset claims costs. The adjuster will also have to carefully examine coverage language regarding parts and determine any previous claims situations with the insured involving spare parts that could help inform the settling of a current claim.


Mark Vos, an executive general adjuster, is responsible for Crawford’s GTS loss adjusting in continental Europe, the Middle East and Africa. He has more than 35 years of experience as an adjuster, operations manager and executive and focuses on losses in the agriculture, engineering, power and energy and technology industries. Contact him at markvos@crawco.nl.

Ian Hasson is head of Crawford Forensic Accounting Service (CFAS) for continental Europe, the Middle East and Africa. Ian has 20 years of experience in providing financial consulting services to clients facing disputes, or in need of forensic accounting advice. Ian has worked on a wide variety of financial investigations relating to litigation, arbitration, mediation, expert determination and fraud as well as numerous insurance claims without the necessity for recourse to more formal proceedings. He has undertaken forensic accounting work on a global basis including the United Kingdom, North America, Continental Europe, the Middle East and Japan. Contact him at ian.hasson@crawco.co.uk.

### ABOUT CRAWFORD & COMPANY

Based in Atlanta, Ga., Crawford & Company (www.crawfordandcompany.com) is the world’s largest independent provider of claims management solutions to the risk management and insurance industry as well as self-insured entities, with an expansive global network serving clients in more than 70 countries. The Crawford Solution℠ offers comprehensive, integrated claims services, business process outsourcing and consulting services for major product lines including property and casualty claims management, workers' compensation claims and medical management, and legal settlement administration. The Company’s shares are traded on the NYSE under the symbols CRDA and CRDB.
Now that it is after June 1 we are in the midst of the six-month Atlantic hurricane season. During hurricanes, adjusters are faced with many issues and challenges in the adjustment process. Losses can occur directly on the exposed oceanfront or much further inland depending on the hurricane’s path and duration. One specific area in the adjustment of hurricane losses that is important to focus on—which sometimes presents a challenge to adjusters—is wind and flood damage. When a hurricane makes landfall, flooding is usually associated with wind. But it has been shown in many instances that storm surge can result in flooding, which can cause just as much damage as wind.

A relevant claim example on the New Jersey shore occurred post-Superstorm Sandy in October 2012, which caused extensive damages to a pier and the amusement rides. A large part of Sandy’s damage was due to flooding from its catastrophic surge, which accounted for approximately 65% of Sandy’s total insured loss. The superstorm caused water levels to rise along the entire East Coast of the United States from Florida northward to Maine. The adjusting challenge came in evaluating the appropriate portion of damage assigned to wind vs. flood.

In the adjustment of these types of claims, it is critical to be able to distinguish and validate the precise cause of the damage, especially when there are multiple factors that may have distinct or shared responsibility for the damage.

Insurance policies have different deductibles for flood and wind and also different policy provisions. Commercial flood insurance is available from a variety of carriers, while most residential flood insurance in the United States is provided through the U.S. government-managed National Flood Insurance Program. When faced with a U.S. claim where there is flood and wind, it is essential that the storm surges be investigated and the actual wind speeds as well. This is necessary for the precise determination of cause for the damages. The National Weather Service has a database that can assist in gathering the supporting data that is needed, including details on wind velocities and storm surge levels during the storm’s existence. There are some claim situations where it will prove prudent to call in a meteorological expert for evaluation and opinion.

In claims where flood and wind damages have occurred, a structural engineer should also be engaged to inspect the site and gather data on the storm surge and wind speeds. It is important that when the engineer compiles the report, specific reference to flood storm surge and wind speeds should be clearly noted. During the investigation of the Superstorm Sandy claim, flood and wind caused extensive damages to the pier and to the amusement rides. In this type of situation the engineer will need to ascertain and list separately which items are damaged from flood and which items are damaged from wind. By distinguishing the causes there will be no ambiguity on the exact peril which created the damages.

In the Superstorm Sandy claim, the damages to the pier were all related to flood; however, the amusement rides were a combination of flood and wind. The claim was settled by assigning a percentage of damages for flood and wind to each amusement ride. Employing industry experts (an amusement rides expert and a structural engineer) was critical in finalizing the claim.
(including loss of customers, drop in share price) at a significant multiple beyond this.

The nature of cyber attacks is also evolving. While the Target breach grabbed headlines, so-called “Point of Sale” attacks are old news, according to Verizon, which warns of a growth in attacks on websites. In today’s interconnected world (think of the risk exposure in the telecommunications, technology and media sector as an example), an online crisis such as the failure of a major cloud provider could well be the next global “shock,” according to a new Zurich report. "Cyber risks are not self-contained within individual enterprises, hence risk managers must expand their horizons," it warns.

INADEQUATE INSURANCE RESPONSE

The insurance industry is at the relative infancy stage of responding to risk managers’ concerns with bespoke cyber insurance products. However, current limits available in the Lloyd's and company market are low and attachment points high. Brokers are working better with insurers to expand wordings in existing classes such as GL, D&O, crime and product liability to encompass company’s cyber exposures, but it is early days. Other brokers are creating specific cyber products and looking for market support both regionally and globally for their wordings.

At present many cyber losses involving digital attacks and data breach are uninsured. Insurers currently lack the data and claims history to build an accurate picture of the exposure and in lieu of this are reluctant to offer broad coverage wording and capacity to fully indemnify against first- and third-party cyber risks.

In the U.S. where the market is most developed, annual gross written premiums are around $1.3bn, according to last year’s Betterley Report. Very few carriers are able to offer indemnity in excess of $50m with the majority writing a maximum limit of $10m or under. In Europe, the market is catching up but the capacity on offer remains limited.

With such an unsubstantial commercial insurance market for cyber some insurance buyers are opting to put these liabilities through their captive insurer — if they have one — or simply retaining the risk on their own balance sheet. We anticipate this will change as the market develops, urged on by brokers requesting broader coverage terms and greater capacity and in part driven by changing legislation.

In March, the European Parliament voted in favor of new European Data Protection Regulation. The reforms include mandatory data breach notification (within 24 hours if feasible) and an increase in fines for failing to protect sensitive information to 5% of annual worldwide turnover (or EUR100m, whichever is greater). While the legislative process has some way to go before an agreed text becomes law it is clear that when the rules come into place it will dramatically increase the exposure of European corporates, creating a more insistent need.

The Seven Aggregations of Cyber Risk

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<thead>
<tr>
<th>Description</th>
<th>Examples</th>
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<tbody>
<tr>
<td>Internal IT enterprise:</td>
<td>Risk associated with the cumulative set of an organization's (mostly internal) IT</td>
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<tr>
<td>Counterparties and partners:</td>
<td>Risk from dependence on, or direct interconnection (usually non-contractual) with an outside organization</td>
</tr>
<tr>
<td>Outsourced and contract:</td>
<td>Risk usually from a contractual relationship with external suppliers of services, HR, legal or IT and cloud provider</td>
</tr>
<tr>
<td>Supply chain:</td>
<td>Both risks to supply chains for the IT sector and cyber risks to traditional supply chains and logistics</td>
</tr>
<tr>
<td>Disruptive technologies:</td>
<td>Risks from unseen effects of or disruptions either to or from new technologies, either those already existing but poorly understood, or those due soon</td>
</tr>
<tr>
<td>Upstream infrastructure:</td>
<td>Risks from disruptions to infrastructure relied on by economies and societies, especially electricity, financial systems, and telecommunications</td>
</tr>
<tr>
<td>External shocks:</td>
<td>Risks from incidents outside the system, outside of the control of most organizations and likely to cascade</td>
</tr>
</tbody>
</table>
1620 mm on the left, and 1800 mm on the right. The front “A”-frame had no lining material to cushion the slabs.

**SECURING THE SLABS**

Over the course of adjusting numerous cargo accidents our adjustors have never seen the linings increase the friction ratio between the slabs and the securing chains. In the example under discussion the maximum of four tightening belts per transport unit were used and no other securing measures were applied.

Nearly all shippers in Italy and Greece use similar methods of packing and securing, often claiming that similar methods have been used safely for more than 100 years. Consequently, they will assert that such packing is conventional and standard for this type of cargo and that it does not require any improvements.

In our opinion, this type of transport packing is insufficient, and does not secure the cargo properly during transportation within the Russian Federation.

**FORCES INFLUENCING CARGO**

In the course of road transportation cargo experiences the effect of inertial forces. The minimum coefficients are regulated by European standards. It is important to highlight the word “European,” because when estimating the methods of cargo securing for transportation within Russian territory one has to consider additional factors, besides those specified in either the IMO/ILO/EU ECE (United Nations Economic Commission for Europe Guidelines for Packing of Cargo Transport Units) or the EN 12195-1 (European Commission guidelines on securing cargo); the differences between those regulations are illustrated in Figures 19 and 20 below. In order to ensure the safety of the cargo during its delivery under Russia’s peculiar transit conditions the following factors must be considered:

- Long-term transportation under various climate conditions, some quite intense (such as Siberian winters);
- Severe vibrations which often impact the cargo and the securing.

**EFFECT OF VIBRATION**

The transport vibration can cause shift of the “A”-frames from vehicle flooring, and, as a result, the securing chain around the slabs can loosen.

**DRAWBACKS TO THE CURRENT SECURING METHOD**

- **A-frames are not stable.** The restraining elements of packing are not connected in a single rigid structure with one another or with the cargo. As a result, vibration causes the shift of A-frames from their initial position.
- **The A-frame inside the transport package can incline** (Figure 21). As a result, the total height of the transport unit is decreased, and chains and tightening belts can loosen.
The A-frame can rotate around its axis inside the transport unit (Figure 22). In the cargo turns then inertial forces are acting on the cargo from an unintended angle, and again, chains and tightening belts can loosen.

Since the driver is incapable of monitoring the securing chains and belts inside a sealed trailer, when they loosen the extremely dangerous result is a 10-ton road vehicle that becomes unsteady and difficult to drive and control. The pressing of the slab-securing structure against the trailer floor will not provide enough friction to keep the cargo steady, and with continued movement and stress the break of the tightening belts is inevitable.

**RECOMMENDATIONS ON CARGO SECURING**

The majority of the standard securing recommendations for materials such as stone slabs state that:

- A-frames should be connected in a single structure.
- The structure should be rigidly connected to the trailer.
- A-frames should be higher than the slabs on them.

It seems obvious that a single support structure of two interconnected A-frames (see Figure 23) would probably spare the cargo carrier serious potential problems, but this modified version is unlikely to be used for both design and historical reasons.

A rigid connection of the A-frame with the trailer is almost impossible due to some design features of the A-frames, including a lack of multiple built-in securing points and the inability of A-frames to interlock. It should also be noted that typically the two base support bars of the A-frame that contact the floor are relatively narrow; they provide less stability and resistance to shifting than a broader support might offer. Also, a European shipper is unlikely to switch to high A-frames from shorter frames that it considers to provide acceptable performance and that have basically been unchanged for decades.

The Transport Information Service of the German Marine provides the following detailed recommendations regarding how slabs should be packed and secured inside a trailer (Figures 24, 25, 26, 27)—this is closer to ideal packing than what are adjusters usually encounter in the real world:

1. “A”-frames are to be connected to each other in a single structure. The cargo can be secured on these structures in advance, in order to avoid shifting of A-frames. The entire cargo transport unit will be secured inside the container.
2. In order to avoid longitudinal and lateral shift of the cargo it is recommended to use wooden buffer stops attached to the floor of a container.
3. Vertical braces are used to avoid inclining.
4. A sufficient number of tension belts should be used in order to avoid any lengthwise shift.

In spite of these carefully thought out recommendations, we have found few examples of them in use.
Research into regulatory guidance from other sources did not uncover any recommendations specifically concerning natural stone slabs and road transportation, but the Swedish National Road and Transport Research (VTI) Institute issued recommendations for the transportation of panels more than 15 years ago, which are illustrated in Figure 28.

Representative samples of VTI’s recommendations include:

- If the cargo is not loaded close enough to the front side of a trailer, a blocking is recommended, using a filling block (➂) or springs.
- In some cases, the blocking, such as a filling block (➂) or springs, is recommended in order to avoid backward shift.
- The slabs are to be put close to A-frames and pressed to the flooring by top-over lashings (➀).
- If necessary, the space between the cargo units is filled with filling blocks (➂).
- Protection linings (➁) are used between the top-over lashings and the cargo.

According to the table from VTI (Figure 29) advising on strap retention strength, the 12 top-over lashings with a clamping force of 400 daN, are the benchmark to secure a 10-ton consignment properly.

**RECOMMENDATIONS FOR PACKING AND SECURING STONE SLABS FOR ROAD TRANSPORT**

Our recommendations to the carrier transporting slabs are as follows. Loading and securing procedures should include:

- Increasing the number of fastening chains to four per cargo transport unit.
- Increasing the friction ratio both between “A”-frames and trailer floor and between the slabs and “A”-frames. The carrier should have enough of its own antiskid rubber mats.
- Use blocking as a securing method, in particular, fill the empty space between the front side and the first transport unit by wooden pallets. Install front and rear springs for cushioning shift and vibration.
- Use top-over securing only to increase the friction ratio.
- Use a sufficient number of loop-type fastenings to avoid lateral shift.
- Use protective linings under the belts to avoid their damage by slabs’ edges.
- Increase significantly the number of securing measures for the rear

CONTINUED ON PAGE 19
transport unit, as this is the unit that experiences the maximum load during the transportation.

In the course of transportation check the condition of chains and lashings at every stop.

The shipper might refuse to increase the number of securing methods, as more straps and compression could cause damage to the cargo during the transportation, but a conscientious carrier should always keep in mind that the cargo, fallen out of the vehicle, is a great hazard to other peoples’ health and life and should take precedence over cargo integrity.

Within the Russian Federation it should be carefully noted that cargo securing techniques—such as restraining straps—have to be at least doubled during the transportation after taking into consideration the state of the road surface and anticipated increased vibrations.

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Figure 28. VTI recommendations for the transportation of panels or slabs.

Figure 29. Strap factor table.

Cyber Insurance

for risk transfer solutions, crisis management and loss value calculations and mitigation strategies.

LOSS CALCULATION

One feature all cyber claims have in common is their high degree of complexity. It is the timely response to these complexities which can help minimise the overall impact of a network failure or data hack. A dialogue between risk managers, information officers, their brokers, insurers and claims professionals is essential in building a distinct methodology for coping with cyber claims. This is best done in advance of the breach; being part of an agreed approach to the loss/claims quantification methodology (CQM).

An effective response will encompass business continuity and third-party notification as well as crisis management and forensic IT investigations. As the standalone market for cyber insurance grows and as existing covers expand to encompass cyber exposures, we will see more and more claims come into the market. Involving claims experts with the capability to handle the inherent complexity of such losses will be a crucial step in convincing risk managers the industry is ready to offer a real solution.

1 Emerging Risks Barometer: ACE European Risk Briefing 2013

2 Beyond Data Breaches: Global Interconnections of Cyber Risk, Zurich 2014

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is then added to the wine to produce the bubbles (carbon dioxide) and unique flavors. Note that while all Champagne is sparkling wine, not all sparkling wine is Champagne. Champagne is a controlled, specific region in France and only certain sparkling wine from that region may be labelled Champagne. Canadian sparkling wine by law can’t be called Champagne.

Sparkling wine is then put in cages in what are called “racks” and then turned upside down in a process known as riddling. Riddling is done over a period of weeks historically by hand, although today it is largely mechanised. This process forces the dead yeast to the bottom of the bottle, and the final process involves pulling out the “plug of yeast,” adding some additional wine or sweetener (the ‘dosage’), and then properly capping the bottle.

The previous description is a simplification of what can be a complicated, multistage scientific process that may take years—from initial grape harvest to final vintage bottling—to complete.

During the storage process, which includes the time the wine is in tank or barrel and after bottling, there are stringent requirements with regards to temperature control and exposure to oxygen. Depending on the product, wine will tolerate only a limited range of temperature before a loss in quality occurs; hot temperatures especially will adversely affect the wine.

In addition, exposing wine to substantial oxygen can affect its quality, and may result in oxidation and the growth of unwanted microbes, which themselves produce compounds that spoil a wine, including volatile acidity ("VA"; the main component of household vinegar).

**TYPES OF CLAIMS**

Wine can obviously be affected by some of the more common perils capable of affecting many beverage-related industries, including fire/explosion, freezing (wine will freeze if the temperature is low enough), improper storage and transport, vandalism, vehicle impact, employee error, and equipment failure.

In regard to fire damage, specifically from heat, wine must be stored at a specific temperature in a cooler. Depending on the product, this controlled temperature can range from 50 to 60 degrees Fahrenheit. As the temperature gets higher wine’s chemical properties drastically change, rendering the degraded wine unfit for human consumption. Conversely, wine that is frozen for a long period of time will also change its properties and become undrinkable.

Examples of employee error could involve hitting a fermentation or storage tank with a skid or a forklift truck, causing the tank to rupture or product to leak from the valve. We are aware of a claim where a winery lost approximately $50,000 in sparkling wine. In this claim, the winery employee forgot to lock the top of the cage of the rack for riddling, and as the riddling machine slowly turned over during a series of days the bottles fell out, crashing onto the floor.

Another case involved wine leaking from a tank valve. Around the valves, there are seals, and in this instance it appears the seals dried out over time and became compromised, allowing wine to leak out.
Less common perils involving wine are contamination, fraud and environmental damage.

In regard to contamination, the making of wine as outlined above is a chemical process. One also has to remember that there is not a pasteurization process in wine (as previously discussed, applying heat is going to adversely affect the product), thus the importance of high hygiene standards and rigorous monitoring of product is of utmost importance. Wine is also a food product, and thus obviously a consumable covered by food production regulations.

Many, if not all, food processing manufacturers have or should have a Standard Operating Procedure (SOP) for their hygiene operations. To summarize, an SOP outlines the hygiene standards for the cleaning of the plant and the equipment; this could include regular schedules and allowed chemicals for scrubbing down floors, cleaning/sterilizing equipment, keeping a maintenance log, and other periodic activities required to maintain acceptable levels of cleanliness.

Sometimes due to lack of funds, lack of education or lack of concern, proper SOPs are not present or enforced. This will at times allow unwanted yeast or bacteria to get into the product. This is not generally a concern with respect to someone getting ill, but makes for very unpleasant tasting wine.

There are numerous examples of unusable wines caused by improper hygiene. Examples include wine re-fermenting in the bottle when there is remaining yeast in the bottle, sometimes undesired particulate matter is clearly visible and/or the wine becomes accidentally carbonated. These situations are normally due to poor winery hygiene and/or less than stringent winemaking practices.

Wine can also have unacceptable VA levels if it’s not properly monitored during the fermentation and storage process, and there are legal limits of how much VA is allowable in wine; in Ontario these government regulations are enforced by the Canadian Vintners Quality Alliance (VQA) and the Liquor Control Board of Ontario (LCBO). High VA levels create terrible tasting wines, and wines with significant VA levels may then only be used as a base for vinegar.

Sometimes VA can be corrected by continuous monitoring and the careful addition of certain organic chemicals to bring the VA levels down.

In regard to winery fraud, this is not common but it has happened. For example a winery has a certain product line that either (1) was a consumable wine, but there was no market for it, or (2) was a poorly made wine, unfit to be marketed and of no use.

Situations have been encountered where the winery has been “vandalized”; mysteriously someone breaks in and opens up all the storage tank valves, allowing the product to literally go down the drain, and a later investigation finds that there was no market for this particular wine.

During the adjustment of wine claims it is important to bring an expert in early to ascertain the viability of the product (i.e., consumability). There have been instances in which the wine is simply being dumped
down the drain as perhaps the VA level is too high and/or it has re-fermented, for example.

When investigating wine claims we will often ask for the following documents:

- LCBO Audit Records (LCBO audits on a regular basis) to confirm quantities of wine in order to ensure collecting taxes
- Vintners Quality Alliance Ontario (VQA) testing results
- All logs and records of inspection
- Analysis of the remaining product

Often it is helpful to call in a wine consultant who can obtain these records. In particular, the quality analysis is of greatest importance since it can determine if at the time of the particular loss the product was fit for sale.

Lastly is the environmental exposure. Although grape juice is basically considered a natural product, it can also be considered a pollutant due in part to its alcohol content, depending on the circumstance of how it is introduced into the environment. There have been situations where wine has escaped from the tank (e.g., due to alleged vandalism) and has gone into the drainage system of the winery, but then it was determined that the drainage went into a ditch and subsequently into the water supply for a nearby property.

Therefore, it is important to know where a product lost through a spill has gone and to ensure that it is at least contained within the insured’s own property.

**COVERAGE**

Insurance coverage usually provides for the standard perils of fire, vandalism, vehicle impact, unintentional employee error, etc. What most policies do not cover under the standard wordings is contamination. Contamination is a specific exclusion.

The contamination (for example) is written under, generally speaking, some type of food product endorsement where contamination is covered.

Again, generally speaking (the definition varies from policy to policy), contamination means the “unintentional alteration” of a good or beverage product (in this case the wine) or the introduction of a foreign material or substance into the food or beverage product (e.g., yeast) in such a way to render the food or beverage product unfit for intended human consumption. Additionally, contamination must be determined by a government authority.

In regards to wine, the LCBO is considered the most appropriate government authority for oversight on contamination and certain other causes of damage. As usually outlined in endorsements, there is a limit on the amount an insurer will cover in regards to loss due to
would include, advertising, promotion and—depending the stage of the wine at the time of the incident (e.g., still in tanks or in bottles) less bottling and labelling costs.

**SUMMARY**

Winemaking has evolved substantially over the years to the present day, where there is a significant amount of science involved throughout every stage of the process. Each winery and winemaker has their own preferences or techniques in the production of a wine as they strive to create their preferred style.

However, gone (or will be gone soon) are the days where wine is produced simply by taste, scent, experience and instinct without paying attention to the hygienic and scientific aspects of winemaking. As wine production becomes ever more precise and dependent upon sophisticated techniques (with less room for error) and often expensive, sometimes elaborate equipment, the potential for claims to occur can only increase. Hopefully, this article has offered some useful insight in the winemaking process and related claims events.

Randy Corsini has more than 31 years’ experience as adjuster and for 25 of those years served as an independent adjuster. Randy works out of Crawford’s St. Catharine’s office in Ontario, Canada. Special thanks to Dr Gary Pickering of Brock University, Professor of Oenology for his assistance.
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