

DECEMBER - 4TH QUARTER ISSUE /2021

# TAPA

*THE QUARTERLY UPDATE FOR THE AMERICAS*



The Transported Asset Protection Association  
The Americas

# Chair's Message



## **Dear Members,**

We entered the year hopeful of economic and human recovery from the pandemic. We can recount the many challenges and opportunities in 2021. And, while we have not fully recovered, we remain optimistic that we will meet 2022 with better resources, more significant synergies, and the continued support of our colleagues in the industry. I am thankful for my family, friends, and colleagues.

The members of TAPA Americas remain some of our best resources and most vital assets. It's been inspiring to experience the support our members continue to provide to one another and our organization. One of our primary goals is to develop a network of industry peers and resources for best practices.

Let's take a brief look at 2021 and a few of our goals for 2022!

## **Membership Growth & Retention**

We experienced significant growth in 2021. Our membership grew by 12% over the prior year, and our member retention and engagement rates increased substantially. That said, we are most proud of the value, resources, and other deliverables we provided our members.

## **Training & Professional Education**

Under the leadership of our Education Committee, we had a record-breaking year for TAPA Standards Training. In 2021, we doubled the number of members that completed the FSR and TSR Standards Training courses. As we continued to provide live, web-based training, new members and long-standing members became more engaged.

Our "Trade School" series presented by Pete Mento offered members and non-members bi-monthly episodes on current events and trends impacting the global supply chain, economy, and logistics. These episodes have become "must-see" events for the industry at large.

We ramped up our webinars in 2021, presenting subject matter experts in the fields of law enforcement, cyber security, ransomware, and trends in new technology.

## **Cyber Security Standards**

In October, our Cyber Security Standards Committee announced its development of the first, TAPA Cyber Security Standards (CSS), to help protect against supply chain cybercriminals.

Our members recognized that as digital transformation and hyper-convergence create unintended gateways to risks, vulnerabilities, attacks, and failures, a cyber resiliency strategy is necessary for our supply chains.

The goal of these Standards is to mitigate cyber risks in the supply chain by developing a global standard that recognizes reasonable levels of cyber security, vendor risk assessments, incident response plans, and secured third-party vendor relationships.

The Standards outline a minimum set of requirements that provide a supply chain cyber security program baseline. Organizations of all sizes may apply the principles and best practices of cyber risk management to improve the supply chain security and resiliency in their critical infrastructure.

### **New Standards Developments**

Our committee leadership teams are working towards Freight Broker Standards and Parking Security Standards. We are encouraged that these efforts will result in deliverables next year. Both committees are still open to receiving new members to provide additional input and testing.

### **T2 Meeting**

After lengthy discussion and deliberation, our Board made the difficult decision to cancel our in-person T2-Meeting previously scheduled for in Memphis.

We based our decision on the travel limitations of our member companies and potential venue safety concerns with the emerging COVID variants. Our goal is to make our upcoming event agendas even more robust, engaging, and educational! That said, we look forward to resuming our in-person events in Q2 of 2022.

### **In Closing**

As we close the books on 2021, I want to thank you for your friendship, membership, and ongoing support. The vitality of our organization is because of you. I also want to thank our Board of Directors and committee leadership teams for their abundance of energy, new ideas, and commitment.

I hope this holiday season brings you good health, happiness, and time with family and friends.

Most sincerely,

W. Allen Gear, Chair  
TAPA AMERICAS



# **Transported Asset Protection Association**

## **PRESS RELEASE**

### **TAPA Releases New Cyber Security Standards for Supply Chains**

Monday, October 25, 2021

BOCA RATON, FLORIDA – The Transported Asset Protection Association announced today that it had developed Cyber Security Standards (CSS) to help protect against supply chain cybercriminals.

Cyber-attacks on global supply chains are becoming increasingly prevalent. Bad actors exploit supply chain vulnerabilities to steal intellectual property, steal or misdirect cargo shipments, corrupt software, surveil critical infrastructure and infiltrate trusted suppliers and vendors. "Our goal is to mitigate this threat by developing a global standard that recognizes reasonable levels of cyber security, vendor risk assessments, incident response plans, and secured third-party vendor relationships," said Allen Gear, Chair of TAPA-The Americas.

"The Standards lay out a minimum set of requirements that provide a baseline for a supply chain cyber security program," said Lina Li, Chair of TAPA - APAC. "Moreover, they allow organizations of all sizes and degrees of risk to apply the principles and best practices of cyber risk management and improve the supply chain security and resiliency of their critical infrastructure."

These standards are intended to be single-level and linked to a certification in the TAPA Facility Security Requirements (FSR) Standard or the TAPA Trucking Security Requirements (TSR) Standard. Accordingly, to request certification under the CSS, an applicant must already be certified by a TAPA-approved independent audit body to FSR Level A or TSR Level 1. Or the applicant can pursue certification simultaneously with the FSR or TSR.

Both the AMERICAS and APAC regions will be supporting the CSS standards with web-based training and supporting resources. More information and a copy of the TAPA Cyber Security Standards are available on the regional websites.

###

The Transported Asset Protection Association is a nonprofit association formed in 1997 to tackle the multi-billion-dollar problem of cargo thefts from supply chains. It is a coalition of manufacturers, shippers, carriers, insurers, service providers, law enforcement, and government agencies. Our members represent every type of company or organization facing cargo crime within the transportation supply chain.



## Why Develop the TAPA Cyber Security Standards?

The Cyber Security Standards (CSS) is the official TAPA Standard to provide a minimum baseline for Cyber Security. It is a shared global Standard that can be used in business/security agreements between Buyers and Logistics Service Providers (LSPs) and/or other Applicants seeking Certification.

In developing the Standards, TAPA recognizes the cyber threats that Buyers and Logistics Service Providers must acknowledge and against which they must develop and implement robust defense systems. The CSS would apply to all of the services provided by an LSP/Applicant.

Cargo crime is one of the most significant supply chain challenges for manufacturers of valuable, high-risk products and logistics service providers. The threat is no longer only from opportunist criminals. Today, organized crime rings operate globally and use increasingly sophisticated attacks on vehicles, premises, and personnel to achieve their aims.

Cyber supply chain risks may include insertion of counterfeits, unauthorized production, tampering, theft, insertion of malicious software and hardware, as well as poor manufacturing and development practices in the cyber supply chain.

As digital transformation and hyper-convergence create unintended gateways to risks, vulnerabilities, attacks, and failures, a cyber resiliency strategy quickly becomes necessary for your business. A cyber resiliency strategy helps your business reduce risks, financial impact, and damage to your reputation.

Moreover, as traditional linear supply chains are transformed into more flexible, digital, and connected customer-centered networks, the number of external links an organization has with others grows significantly.

Our TAPA Cyber Security Standards (CSS) offer a minimum set of requirements that provide a baseline for a supply chain cyber security program. As such, they allow organizations of all sizes and degrees of risk to apply the principles and best practices of cyber risk management and improve their critical infrastructure's supply chain security and resiliency.

# TAPA APAC NEWS

## TAPA APAC, received Non-Government Organisation License to Operate in China and contributed to the development of Pudong “Golden Middle Ring”

The first licensed non-government organization in the industry

On the afternoon of October 27 2021, Transport Asset Protection Association, Asia Pacific (TAPA APAC), was honored to be issued with its Non-Government Organisation license to commence operations in China by Shanghai Public Security Bureau, Pudong Branch. As the first licensed non-government organization in the industry, this is indeed a proud and exciting moment for TAPA APAC and all of our members after years of efforts and preparation.

Since the promulgation and implementation of the "Law of the People's Republic of China on the Management of Activities of Foreign NGOs in the Mainland" on January 1, 2017, TAPA APAC have strictly complied with the regulations and ceased all internal and joint activities, and had transferred our member support services for our Chinese members to the Singapore headquarters. Although this has brought a lot of inconvenience to our China members, our industry and standard recognition has nonetheless been continuing to increase globally, just as the number of members in China is also increasing year on year. To better serve our members in China and help them cope with the increasingly severe supply chain security and risk challenges, while ensuring compliance to the law, TAPA APAC has been actively communicating with various Shanghai government departments in the past five years with the objective of gaining permission to set up TAPA APAC's representative office in China.

"For the past few years, we have been relentlessly implementing and improving systematically TAPA APAC's process and operation in order to meet the domestic management requirements for foreign NGOs. Based on the recommendations of the Pudong New Area Public Security Bureau, we had proposed for Shanghai Municipal Transportation Commission be the business supervisor of our association. After strict expert review and qualification checks of TAPA APAC, TAPA APAC was finally approved on August 25, 2021, by the Shanghai Municipal Transportation Commission to become the business leader of our association." said Alan Liu, chief representative of TAPA APAC China.

On July 15, 2021, the central government issued the "Opinions on Supporting the Pudong New Area's High-Level Reform and Opening-up and Building a Leading Area for Socialist Modernization". The document clearly requires Pudong New Area to "attract more international economic organizations and corporate headquarters in China (Shanghai) Settled in the Pilot Free Trade Zone". TAPA APAC responded strongly and signed to join the "Foreshore International Economic Organization Cluster" created by the China (Shanghai) Pilot Free Trade Zone Expo Administration in the Expo Qiantan area. After TAPA joins the Qiantan International Economic Organization Cluster, it will strive to provide our resources to support the supply chain industry and do its part to promote the growth and development of Pudong as a whole.



"After years of TAPA APAC's determined efforts, putting in gradual implementations and improvement of the domestic management measures for foreign NGOs, TAPA APAC put forth to have our association reviewed by the Shanghai Municipal Transportation Commission as per recommended by the Pudong New Area Public Security Bureau, in early 2021. After rigorous expert review and qualification review, we are delighted to share that on 25th August 2021, TAPA APAC has finally obtained the approval from the Shanghai Municipal Transportation Commission to be the supervising government unit to our association." said Alan Liu, China Chief representative of TAPA APAC.

With the signing into the Qiantan International Economic Cluster, TAPA APAC responded strongly to the government's call to join the Shanghai Pudong World Expo Administration, announced on 15th July 2021, by the Central Committee of the Communist Party of China and the State Council. We endeavour to provide our resources to support the supply chain industry and doing our part to promote the growth and development of Pudong in its entirety.

The central government had also issued an announcement, "Proposal To Supporting Pudong New Area's High-Level Reform and Opening-up and Building a Leading Area for Socialist Modernization", on July 15, 2021. This proposal clearly requires Pudong New Area to attract more international economic organizations and corporate headquarters into China (Shanghai) into the Pilot Free Trade Zone. TAPA APAC had responded strongly with vigour and shown our support by signing to join the "Foresore International Economic Organization Cluster" created by the China (Shanghai) Pilot Free Trade Zone Expo Administration in the Expo Qiantan area. With this joining, TAPA APAC endeavours to strive to provide our resources to support the supply chain industry and do its part to promote the growth and development of Pudong as a whole.

#### **TAPA APAC's supporting the supply chain ecosystem in Pudong**

Prior to the issuance of the license, TAPA APAC was also invited to join the "Golden Middle Ring Development Belt" signing ceremony, held on the afternoon of October 26. The "Golden Middle Ring Development Belt" Global Promotion Conference was held in Shanghai Center to introduce Pudong's important development strategies in its "14th Five-Year Plan" to global investors to develop Pudong into a leading area for socialist modernization as it sets its sight to become one of the best investment destinations.

The event was graced by Mr. Zhu Zhisong, Member of the Standing Committee of the Shanghai Municipal Party Committee and Secretary of the Pudong New Area Committee, and Hang Yingwei, Deputy Secretary-General of the Shanghai Municipal Government, Deputy Secretary of the Pudong New Area Committee and District Mayor, were invited to attend.

At the conference, TAPA APAC, along with Takeda Pharmaceuticals, the largest biopharmaceutical company in Asia, and Marriott International, an international hotel management company signed a Memorandum of Understanding to be the latest bodies to step foot and join the "Golden Middle Ring Development Belt", injecting new vitality in this grand Pudong development plan.

A budding city needs an effective supply chain management while an efficient supply chain underpins the sustainability of a thriving city. TAPA APAC, is an organisation that looks at unifying all supply chain stakeholders, through the provision and sharing of security standards to cargo facilities and fleet management, such that precious commodities are not lost when managing international supply chains. TAPA APAC looks to playing a collaborative role and contribute to this gigantic ecosystem in Pudong.

As China continues to develop robustly, we are seeing an increasing need for supply chain standards to be upheld and elevated. At TAPA APAC, elevating supply chain standards is our core focus. we look to share our knowledge with supply chain practitioners to enhance supply chain safety and therefore improving the efficiency of protecting businesses from all walks of the industries," said Lina Li, Chairman of TAPA APAC.



Ms. Lina Li, Chairwoman  
**TAPA APAC**

# Expert Insight on 2021 Supply Chain Issues



Supply chain issues have been a common theme in 2021. To help us understand the implications for the transportation industry, we spoke with Scott Cornell, vice chair of the TAPA Americas Board of Directors, and Transportation Lead, Crime & Theft Specialist, at Travelers.

## **TAPA: What are some of the issues we're seeing with the supply chain?**

**Scott Cornell:** One of the most talked about issues this fall has been the cargo and ship backup that have taken place in several large U.S. ports and around the world. We've also heard about similar gridlock in railways and trucking as well as issues with warehouse capacity.

Several factors have contributed to the current environment. First, fluctuations in demand during the pandemic have been more extreme than those the supply chain usually experiences. At the beginning of the pandemic we saw decreases in trade as the economy slowed and businesses closed. Next came huge increases in online shopping, followed by some port authorities reporting record-breaking numbers of shipments. These shifts in demand, paired with COVID-19-related restrictions and labor shortages, mean all aspects of the supply chain have been strained.

## **TAPA: What are the implications of the supply chain backups you mentioned?**

**Scott Cornell:** Most of them are the obvious ones, such as congestion, and capacity. Something that isn't obvious or discussed enough is the effect that all of this can have on cargo theft. With supply chains strained, cargo sits for longer periods of time on the way to its final destination. And when cargo sits, it is more vulnerable to theft. The adage, 'freight at rest is freight at risk' is going to be very relevant as we deal with this supply chain bottleneck. Additionally, when things are this busy, we all need to remember to slow down just a little bit and pay attention to detail, which includes concerns about theft, scams, and organized rings trying to take advantage of the situation.

Thieves steal what they know they can sell, so when demand for certain products increase, thieves will target those items specifically for theft. The increased demand for products and ecommerce upticks mean thieves can easily sell. Examples of this include the recent targeting of electronics in Southern California, food and beverage during economic downturns, building supplies during hurricanes and floods, and household goods during the pandemic.

Businesses can help protect their cargo by being aware of the increased potential for theft, educating their staff on current trends and theft locations, and implementing best practices like the TAPA FSR and TSR standards as well as the newly completed TAPA cyber standards. Industry networking is key to staying on top of the most recent cargo theft trends and having a network of resources available for assistance and expertise across the cargo theft community if theft occurs. TAPA members can also access its IIS system, which tracks the latest thefts and data that our members can use to stay current.

**TAPA: How will the holiday season affect the current cargo issues?**

**Scott Cornell:** Traditionally, the industry sees what is known as a fourth quarter bump due to holiday demand. Along with a bump in demand for goods comes a bump in thefts. The holiday season will further exacerbate the current issues because the supply chain is already strained.

As long as demand stays high, cargo theft will most likely continue to be a concern. That's why it's important to take steps to help reduce the likelihood of theft, such as making sure that drivers are properly trained and have the latest information available with regard to where thefts are occurring, what items are being stolen, and how they are being stolen. This will allow drivers to better participate in preventing theft while trying to move their goods safely.

**About Scott Cornell:**

Scott Cornell, National Transportation Lead, Crime & Theft Specialist, at Travelers, has more than 25 years of experience in the transportation and insurance industry. He helped create Travelers' Special Investigative Group, a cargo theft unit unique to Travelers' clients. He is also vice chair of the TAPA Americas Board of Directors, leading its Intelligence Information Services program.



# Looking through the “Lens” of Security: Preparing Future Supply Chain Security Professionals



*TAPA members often inquire about college and university programs available in the area of supply chain security. While we do not endorse specific schools or programs, we do try to bring useful information to our membership for consideration.*

The Embry Riddle Aeronautical University, College of Business, Security and Intelligence educates future business and security professionals far beyond the stereotypical view of the security function as guards, guns, gates and locks. Our classes prepare professionals for careers in fields of security, cyber and intelligence nationally and internationally. We have 1000+ alumni in Federal and local government agencies, US Military and Customs, along with multitude of private sector roles. One degree track is Global Business Supply Chain Management that includes a dedicated class in Global Transportation and Supply Chain Security.

Students are trained in disciplines of physical and cyber security, intelligence collection and analysis and risk with focus concentrations in global supply chain operations, transportation and security. We posit that everyone is part of a supply chain and take a systems view with integration of multiple physical, process, cyber and information security systems to create a robust, sustainable and resilient supply chain.

We set the environment for study with the statement of Dr. Art Arway in his book; "Supply Chain Security: A Comprehensive Approach"

*"The world of supply chain security operates in a harsh environment. It is not for the faint of heart. It is not a hobby. It is not a part-time job. The environment is intense, relentless, and indifferent to sensibility and civilized culture. It preys upon the weak, the unaware, the complacent, and the ill prepared. Any gap, anywhere, at any time can be detected and exploited".*

The development of globalization and international trade includes complex supply chain partnerships, trade agreements and multiple logistics service providers creates a universe of complexity and aggregate risk. We prepare students to comprehend fundamental business knowledge of worldwide supply chain systems including logistics, accompanying data flow, IoT (internet of things), product integrity security and Intellectual Property Rights. Supply chain strategies are considered and they learn skills of LEAN production, Systematic Problem Solving and Continuous Process Improvement including concepts of value add, non-value add and waste elimination in systems. They also learn to Process Map material flows from origin to final delivery and utilize the 5-step C-TPAT Risk process as a guide.

We stress that there is a definitive and detailed process for formal Risk Management. We teach concepts of risk as 'uncertainty and proximity to uncertainty' (R. Kadam) with intent to gain more knowledge of the risk(s) to create appropriate response strategies. All supply chain security endeavors are based on risk/threat/vulnerability identification. Then, analysis and cost utility measures developed to reduce risk and minimize negative impact. Students apply these skills to business operations through the **"lens of security"** and recognize uncertainties of risk apply not only to the parts, but the entirety of the global supply chain. The concepts of weakest link or Single Point of Failure (Lynch) becomes the focal point for risk analysis and they develop actionable response options to reduce or eliminate the threat (or exploit the opportunity).

The mindset of Risk and Single Point of Failure is applied to materials, goods and people (and accompanying data) moving through the supply chain, transiting international borders in conveyance including passenger air, air cargo, marine, pipeline, truck, rail, intermodal and common carrier. This includes calculated responses to unforeseen events such as force majeure or terrorism to maintain business recovery and continuity of operations.

In addition to texts focused on Global Supply Chain Security, students research and utilize resources from multiple sources including the US Customs and Department of Commerce websites, standards from ASIS (SCRM-1, ORM1-2017) TAPA (FSR, TSR, TACSS), BSI, ISO and others. Students also subscribe to PCSC Alert (Pharma Cargo Supply Chain Security Alert), Air Cargo News, Journal of Commerce and other trade publications. These publications are invaluable as case study analysis is conducted and students determine 'what went wrong' and what mitigation might have prevented the theft or other loss. Several other trade publications are utilized in similar fashion to stay abreast of changing conditions and technology. Analysis of current events such as the recent Suez Canal blockage and the 2016 Hanjin bankruptcy provided glaring examples of the impact of supply chain disruption on a global scale.

To keep up with the ever changing threat landscape, we make use of industry experts who are guest speakers to the class. Each class includes a presentation with a Q&A session for example, from BSI addressing Supply Chain Fragility and Resilience. From the Healthcare Distributors Alliance discussing issues in the Healthcare and PCSC environment. A Dairy and Agricultural Economist. A Licensed US Customs Broker who discusses Trade Compliance matters, the role of the CTPAT Security Officer, and other speakers from ASIS and related professional associations. Trade Compliance Export, EAR, ITAR Dual Use Technology are sufficiently covered to make students aware of the risks and penalties for violation.

Learning assessments: While students are given quizzes on the vast amount of material presented, class discussion and exercises are used to tie it all together.

- The historic movie "A Dispatch from Reuters" is shown and students write a paper and describe how speed, accuracy of information, technology development and competition for developing new information influences business and can threaten legitimate commerce. It addresses the ethical use of information which Supply Chain Professionals must consider.
- Students research an E-Commerce Deception investigation and prepare an executive presentation to the class. Focus is on Brand Protection, counterfeits, IPR and Trade Mark infringement with screen capture of evidence. The internet is rife with fraud examples and students investigate the sources of misinformation and planned deception.
- The historic movie "A Dispatch from Reuters" is shown and students write a paper and describe how speed, accuracy of information, technology development and competition for developing new information influences business and can threaten legitimate commerce. It addresses the ethical use of information which Supply Chain Professionals must consider.
- Students research an E-Commerce Deception investigation and prepare an executive presentation to the class. Focus is on Brand Protection, counterfeits, IPR and Trade Mark infringement with screen capture of evidence. The internet is rife with fraud examples and students investigate the sources of misinformation and planned deception.
- Final project paper. A comprehensive report where a product is sourced from China, Malaysia or other country of origin and process map the entire material and information flow, through US Customs to last mile delivery to a specific address in USA. Students can choose any product of their choice and must follow US Trade/Import regulations. The C-TPAT risk assessment is followed for every step. Analysis includes packaging at origin, transport to port, container inspection and stuffing, vessel lading procedures, HTS codes, taxation amounts, choice of INCO terms chosen and several modes of transport and handoffs must be used. In addition to the final paper, students also prepare an executive power point presentation to the class who can then offer guidance or 'red team' critique.

**Internships:** Whenever possible, we try to engage students in active internships in Supply Chain operations. Some are full semester roles but we also use "micro-internships" wherein students engage for 1-6 weeks and complete a targeted or focused task for the company. Feedback has consistently been positive with managers reporting amazement of the skills, industry knowledge and immediate value add contributions of interns.

Embry-Riddle is a Focus School for Supply Chain Management with the Boeing Company and has strong industry partnerships and relationships with companies inside and outside of the aviation industry. Our students have held internships in a variety of companies with some of the internships leading to full-time offers including leadership pathway programs for our graduates. Some of the companies our students have recently interned include Amazon, Boeing, Shasta Industries, Tesla, Bell Helicopters, TJX, FedEx, Raytheon, Lowes, Collins Aerospace, Lockheed Martin, PCSC and others.

Typically, students take the Global Supply Chain and Transportation Security class as juniors or seniors thus, able to apply all the skills they have learned at ERAU to the final project. While the breadth of information covered in class is immense, and changing daily with current events, student feedback is very positive. They leave with the confidence knowing the broad, integrated nature of global supply chain systems, all its components, and recognition of the compound and aggregate risk that exists at each link in the chain. With their acquired skills, students examine all business operations through the 'lens of security' and can make informed decisions for appropriate micro level threat response while simultaneously maintaining a global perspective. They can 'hit the ground running' on that first job. They are well prepared from a historic understanding of supply chain systems, the impact of rapidly developing technological change and advanced security methods to step into the roles of the next professional supply chain managers.

Reginald (Reg) P. Parker C.A.S., M.S., PMP, CPP is an Assistant Professor of Corporate Security at Embry Riddle Aeronautical University – Prescott, Arizona in the College of Business, Security and Intelligence

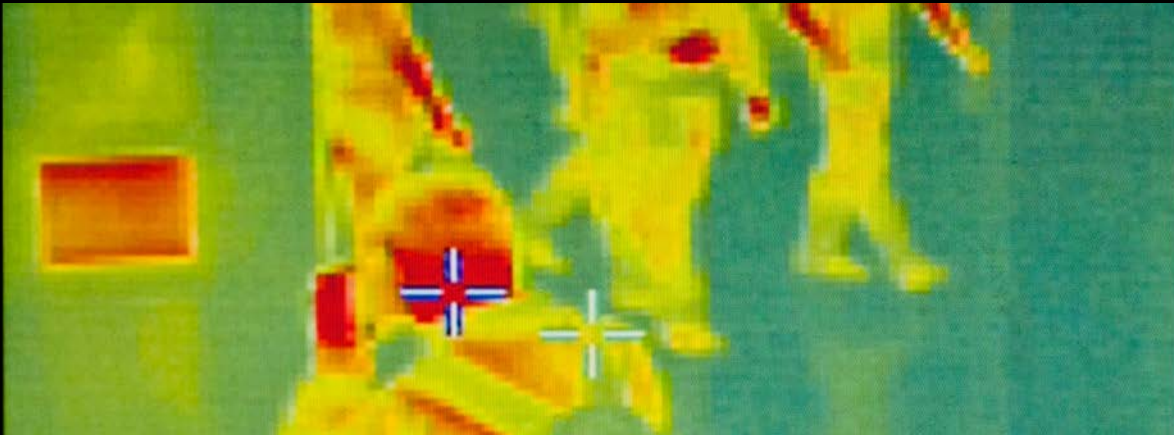
Professor Parker's career has included International Technical Program Management with General Electric, Motorola/Freescale and NXP Semiconductor. At Motorola, he managed the Global Assets, IP Protection and Reclaim Operation Program. He developed the Reverse Supply Chain protocols for control and return of high technology manufactured products, managed global precious metals recovery contracts, and led the semiconductor anti-counterfeit team in concert with US Customs and the Motorola Law department. He has written and presented on the topic of Brand Protection and Reverse Supply Chain Controls for High Value Targeted Theft materials to the Semiconductor Industry Association and ASIS.



Parker teaches graduate and undergraduate classes in Global Transportation and Supply Chain Security; Risk, Threat and Vulnerability; International Security Operations, Program Management; Security Fundamentals

If you are interested in learning more about the program or offering an internship, you can reach Reg Parker at [Parker17@erau.edu](mailto:Parker17@erau.edu)

# Thermal Cameras Are Providing Asset Protection to the Transportation Sector



Security concerns are top of mind for those who operate in the transportation sector. And detecting those threats ahead of time can be really tough, given all the electronic and physical networks that are employed within the transportation sector.

And while there are countless threat scenarios, and cyber ranks high among them in today's climate, physical security threats always have been, and continue to be, key among them.

Ports, railways stations, airports and other transport terminals are often very densely populated. Controlling crowds, managing safety and swiftly responding to threats in these environments is an overwhelming task for security personnel. And, for those charged with securing freight hubs, worker safety and theft remain hot security buttons. Reports show that theft is one of the most pressing problems that all types of freight terminals, especially where high-value goods are being handled, face.

As reported on LossPrevention.com, "Cargo theft statistics vary, but it is generally agreed upon that cargo theft is a \$15 to \$30 billion-dollar problem each year in the United States. Exact numbers are impossible to determine in that many cargo crime incidents go unreported, and the numbers related to those incidents that are reported differ greatly by agency. Regardless, the most recent cargo theft statistics available continue to be sobering."

Physical security solutions and technology are strong weapons in the arsenal of security teams tasked with protecting transportation hubs. From intrusion detection to access control to video surveillance, innovations in security technology are continually aiding in defending transport security.

But for certain transportation entities such as highways, airports, tunnels, bridges, and ports, challenging terrains and environmental conditions can limit the usefulness of video surveillance cameras, and these drawback must be taken into consideration. Security personnel responsible for monitoring what's happening in hard to see areas – such as boats under a bridge, fire or smoke in a tunnel, or fog-prone waterways where vessels are trying to securely approach a port, for example – are reaping the benefits of thermal imaging cameras. That's because thermal cameras can provide detection and pivotal information regarding a scene whereas a standard visible camera cannot.

Plant managers within the transportation industry are becoming increasingly more aware of the benefits of thermal imaging. Thermography is becoming much more widely adopted because the operational advantages gleaned from the use of technology is becoming much more widely recognized across the board.

By definition, thermal imaging is non-contact technology which measures infrared wavelengths emitted from objects and converts the temperature information into an image – images that are critically important to safety and security in transportation applications. Thermal cameras can see what the human eye cannot – invisible heat radiation – regardless of lighting conditions – and provide high quality images which are so instrumental in protecting transportation hubs, particularly at night. And unlike standard video surveillance cameras, thermal cameras also have the ability to pass through visual barriers, such as trees and foliage, and provide footage that shows clearly what is actually taking place.

Reducing false alarms is always top of mind for security teams and thermal cameras actually help a lot in that quest, as well. High contrast thermal imagery helps reduce the number of false alarms because their motion detection alarms are only triggered by moving heat sources and not by harmless distractions such as moving debris or tree branches. Thermal cameras are being widely adopted and proving to be extremely effective in providing asset protection to the Transportation sector.

AUTHOR: Alex Reichard, Sr. Account Manager, NextGen Security, LLC

Headquartered near Philadelphia, PA, with a major operation in Houston, TX, and several regional offices throughout the country, NextGen Security, LLC is an integrated physical and electronic security provider specializing in solutions for regulated entities and facilities in key vertical markets

# THANK YOU TO OUR SECURITY SERVICE PROVIDERS (SSP) MEMBERS!

Cal/Amp®

 **TydenBrooks®**  
SECURITY PRODUCTS GROUP

 **OVERHAUL**

 **SENSITECH**  
United Technologies  
SUPPLY CHAIN VISIBILITY

**bsi.** | Supply Chain  
Solutions

 **GuardianArc**  
International

**ONASSET**  
INTELLIGENCE

 **SQUAD SECURITY**  
Security Services & Investigations

**AT RISK**

  
**MEGA FORTIS**

 **sendekem**  
incorporated

**WARNING**  
PROTECTED BY AN AUTOMATIC  
**BABACO**  
ALARM SYSTEM  
NOT UNDER DRIVER'S CONTROL  
BABACO  
WWW.BABACO.COM

**SENSTAR**

 **BLUE STAR SECURITY**  
Chicago's Finest Protection

 **7 SOLUTIONS**

**NEXTGEN**  
SECURITY